

CHILDHOOD EDUCATION

Published by the
ASSOCIATION FOR CHILDHOOD EDUCATION
1918 HARFORD AVENUE
BALTIMORE, MD.
and
1201 SIXTEENTH STREET, N. W.
WASHINGTON, D. C.



Vol. VII

OCTOBER, 1930

No. 2

Table of Contents

NUMBER IDEAS OF YOUNG CHILDREN. <i>Josephine H. MacLatchy</i>	59
THE BUILDING OF SOCIAL HABITS THROUGH AN ACTIVITY PRO- GRAM. <i>Marjorie Wylie</i>	67
THE QUESTION OF POSTURE. <i>Effie Phillips</i>	76
THE CAFETERIA AS AN INTEGRATING ACTIVITY. <i>Elga M. Shearer and Blenda Butts</i>	81
PROVIDING FOR IMMATURE SCHOOL ENTRANTS. <i>Katherine L. McLaughlin</i>	85
MORE SUGGESTIONS FOR THE KINDERGARTEN-PRIMARY CLASS- ROOM. <i>Edwina Fallis</i>	92
SUPERVISING THE YOUNG TEACHER: HOW THE PRINCIPAL MAY HELP THE YOUNG TEACHER. <i>Dorothy Kay Cadwallader</i>	95
DEMONSTRATION TEACHING AS A MEANS OF HELPING YOUNG TEACHERS. <i>Maycie Southall</i>	98
WHAT METHODS SHOULD BE EMPLOYED IN CHANGING THE POINT OF VIEW OF A YOUNG TEACHER? <i>Marjorie Hardy</i>	101
BOOK REVIEWS. <i>Alice Temple</i>	102
AMONG THE MAGAZINES. <i>Ella Ruth Boyce</i>	105



A CLASSROOM LIBRARY AND A SCHOOL LIBRARY IN CLEVELAND, OHIO



**Mt. Auburn School
Courtesy, American Library Association**

CHILDHOOD EDUCATION

For the Advancement of Nursery—Kindergarten—Primary Education

Vol. VII

OCTOBER, 1930

No. 2

Number Ideas of Young Children¹

JOSEPHINE H. MACLATCHY

Bureau of Educational Research, Ohio State University

NUMBER—abstract quantitative thinking—presents a curious contradiction in the realm of instruction; for, although tuition is needed for the mastery of many arithmetical processes, the first steps of number must be taken by the little child himself untrammelled by teaching. Miss Drummond has said: "Realization of the nature of number comes slowly to the child through his own activity in counting" [8, 12]

This maturity of the child's power to think on an abstract plane is not postponed so long as many theorists would lead us to believe. Normal children, if taught the number names and encouraged to count, will master many of the simpler number relations and combinations by the time they are six or seven years old. Mlle. Monechamp, a proficient student of child psychology, says, "Before entering school, the child possesses an idea of number which has already demanded a mental effort of greater intensity than any later mathematical exercise will ever necessitate" [6, 237]. And she was not think-

ing of infant prodigies, but of children whose number ideas had been allowed to develop through their own experiences of quantitative relations.

Binet happened quite accidentally to discover certain significant characteristics of a young child's ideas of number while testing the spacial perceptions of two little girls—one aged four years; the other, two. Although the older child could distinguish correctly in nine out of ten trials the larger of two groups of counters—the groups numbered 15 and 18, 16 and 18, 17 and 18—when the counters were of the same color and size, he discovered that her judgments were based upon the spacial characteristics of the groups and not the number of objects composing them. He found that the four-year-old understood the numbers to four, and with some practice to five. The two-year-old "could not recognize the numbers with any assurance beyond three" [2, 80]. To Binet a child's facility in counting became one measure of his mental maturity. Eighteen years later, when making their last revision of the Binet-Simon intelligence test, the collaborators said, "A

¹A paper read before Research Conference, International Kindergarten Union, April 23, 1930.

three-year-old child cannot count four sous, at four years, half of the children succeed; at five years only retarded children fail" [3, 201].

Most of the well-known diarists of children—Preyer, Sully, Stern, Dearborn, and Drummond—have recounted acts or quoted remarks which indicate the child's developing appreciation of numerical relations. The classic in this phase of child study is Dr. Decroly's account of his little daughter's ideas of number from the time she was fourteen months old until her fifth birthday. The first indication of an idea of quantity which he noticed occurred in the following incident:

The child (aged thirteen months seventeen days) had just been weighed, and put back on the floor. She began to play with the weights of the scales. There were three. She struck them, one against the other, amusing herself with the noise they made, and pushed all three ahead of her (she was on her hands and knees). When one of the weights rolled away or became hidden under her, she found it again and placed it with the others.

Here was evidently a visual idea of the group formed by the weights from the scales. When this group, this combination of which she had the representation, changed in aspect in regard to number, the child noticed it, found the cause and remedied it [5, 86].

The careful observations made, the keen appreciation of slight differences which were signs of advances in the child's mastery of number ideas, the ingenuity used in devising tests to indicate the child's development—these and other excellent characteristics of Dr. Decroly's study can best be indicated briefly by quoting the generalizations in which he summarized this diary of Suzanne's number development:

The child uses the names of numbers at first only mechanically; then with the idea of sequence, before really using them to number. Before knowing how to number, he is already capable of accounting for the constitution of groups; numbering itself is only done awkwardly at the beginning, the child is not able to go beyond "two" (about two years of age); then, a long time later, "three," whereas quantities above this number are indicated at random. Further, we observe the preparatory step where

the child accounts for the presence or the absence of things. Then we see an interesting and absolutely logical step, the idea of "two" preceding the numerical idea of "one." . . . We see also the moment when the question "how many?" is understood, then that moment when it is used by the child first with a utilitarian end, later with speculative purposes. The appearance of "three," "four," and also "five" as ideas and as verbal usage can also be noted. Some few observations can also be made on the aptitude at imitating groupings of fingers or of objects where the number factor plays a part. Finally, we detect certain steps in the development of the aptitude to divide continuous quantities to decompose the first numbers odd or even. Doubtless, it is still necessary to make many observations of children in order to be more precise on certain points and to discover others, but we believe that the idea and the use of the first numbers is more precocious than the composition of arithmetic programs used in the elementary schools seem to indicate [5, 118 ff].

Dr. Decroly used various sorts of games and trials at matching arrangements of fingers, little sticks, and small objects of various sorts when testing his little daughter. These he elaborated into a series of tasks which may be used as practice exercises or as a means of determining a little child's proficiency in number.

These tests of Dr. Decroly have been adapted and extensively used by Mlle. Descoeudres, of the Institute Jean Jacques Rousseau, at Geneva, Switzerland. She has tested more than three hundred children whose ages ranged from two to six years. After testing the small children of her friends; and the younger brothers and sisters of the pupils in the school, she resorted to what she terms a "most audacious method" and asked unknown parents in the streets and public gardens if they would "lend" their children to her "to put some questions to them." To her "audacious methods" she adds enthusiasm, for she writes:

Among the most interesting problems in experimental psychology there are few it seems to me as captivating as the investigation of the development of the idea of number among quite young children, so that although I have done a great deal of exploration in this province, my fear is that I shall not know how to reproduce all its charm and interest [6, 234].

Two important studies of number knowledge of kindergarten and first-grade children in Germany—one by Filbig, the other by Beckmann—were made about 1923. Filbig tested 102 kindergarten children, Beckmann 465 children between the ages of two and six. Dr. Stern, the famous German child psychologist summarizes the results of these French and German investigations thus:

The numbers 2, 3, and 4 were mastered by the children at the following average ages:

	2	3	4
Beckmann ²	3;6-4;0	4;0-4;6	5;0-5;6
Filbig	3;9	4;2	5;6
Descocudres	3;0	4;0	5;0

Arithmetical development makes its greatest progress about the age of four, namely at the time when the child masters the distinction between 1 and 2. As soon as the 3 idea is conquered, the way is apparently clear for the higher numbers [11, 416].

With the background of these facts regarding pre-school children's ideas of number which other experimenters had gathered, the writer in collaboration with B. R. Buckingham devised a simple test to determine, in part, the number knowledge of six-year-olds when they enter the first grade.³ Since the test was to be given within the first two weeks of school, it had to be made by individual interview. Since it seemed better to test many children on a few phases of number knowledge rather than a small group on many phases, the interview included tests of rote counting and counting with enumeration; ability to arrange a specified number of objects and to name numerically a designated group of objects; and addition combinations in problems and with objects.

The test was given to 1,356 six-year-old children in ten cities of Ohio and the rural schools of two counties and to all the first-grade pupils in Cincinnati (4). Only the records of the 1,123 six-year-

olds from Cincinnati will be considered here.⁴ Since rather interesting differences are shown by the records of the 740 children who had attended kindergarten—the so-called K Group—when the records are compared with those of the 383 children who had no kindergarten training, the N-K Group, each will be reported.

In the first test the child was asked, "How far can you count?" Only one of the kindergarten children could not count at all, while thirteen could not count beyond 1, 2, 3, 4, or 5. Four of the children who had not gone to kindergarten could not count, while 26 more counted only as far as 1, 2, 3, 4, or 5. The percentages of the members of the groups who could count are summarized as follows:

Rote Counting	K Group (Per Cent)	N-K Group (Per Cent)
Could count to 10.....	93	80
Could count to 20.....	74	44
Could count to 50.....	28	14
Could count to 100.....	13	5

Two trials of this test were given, and each percentage is an average of the two records. The median performance of the kindergarten children on the second trial was 30.1, that of the children who had not gone to kindergarten was 20.2. The typical kindergarten child was able to count one decade farther than the typical child who had not gone to kindergarten. Thirteen per cent of the K group and 5 per cent of the N-K group could count to 100.

Rote counting does not necessarily guarantee that the child understands the real meaning of counting, that is, that one number stands for one object. Children who have not mastered the enumerative aspect of counting will point to one object, while saying several numbers, or indicate several objects while repeating one number. Indeed, counting by rote may be learned parrot-fashion, and the child may not have mastered its real signifi-

²The German form 3;6 means three years six months.

³Copies of the test, Number Test for Pupils Entering Grade One, may be obtained from the writer.

⁴A six-year-old throughout this discussion will mean a child who was between six years and six years six months old on September 1, 1928—the time the test was given.

cance. The second test was arranged to measure this aspect of number knowledge. The child was given twenty small similar objects and asked to count them. This test was too easy because 70 per cent of the K Group and 48 per cent of the N-K Group correctly counted the 20 objects. The summary of average percentages for the two trials of this test is:

Counting Objects	K Group (Per Cent)	N-K Group (Per Cent)
Could not count.....	1	1
Could count to 10.....	94	82
Could count to 20.....	70	48

The next two tests were arranged to determine, if possible, the usefulness of the child's ideas of certain numbers. Beckmann found four phases in the activity of the child with each of the first five numbers. He called them reproducing, "Give me 2 dice"; differentiating, "Is this 2 or 3"; finding, the child chooses the designated group from other small groups; and naming, the child gives the group its number name [1, 11].

Beckmann found that these abilities appeared at different ages and generally in the order in which they were named. He found also that they had different rates of developing, but by the time the child was six years old they played rather similar proportionate rôles in his thinking. Beckmann estimated that reproduction covered about 26 per cent and naming about 23 per cent of the six-year-old's number concepts [1, 23]. Naming he considered the hardest of the four, and he agreed with Dr. H. H. Goddard and others in their belief that feeble-minded children never master this phase of number.

Only the first and the last of these activities were tested—reproducing which was called "Number Selection" and naming which was termed "Number Identification." The child was asked to place before the teacher 5 of the 20 objects which he had used in taking the second test. If he could do this, he was asked to arrange groups of 6, 7, 8, and 10

objects but not in their usual order.⁵ If he could not give 5, he was asked to give groups of 1, 2, 3, and 4 objects. Three trials of this test were given, but not in succession. In Table I each percentage represents the sum of the children who could select each number once, twice, or three times. Five was known, at least once in three trials, by 92 per cent of the K Group and 74 per cent of the N-K Group. It was considerably more familiar than the other four numbers. Judged by the percentages, 6 and 7 were next most familiar and 8 and 10 least familiar, but the members of each pair were of about the same degree of familiarity. Larger percentages of the group that had gone to kindergarten were familiar with these numbers than the corresponding percentages of the N-K

TABLE I
PERCENTAGES OF THE MEMBERS OF EACH GROUP WHO GOT EACH NUMBER CORRECT ONCE OUT OF THREE TRIALS

	5	6	7	8	10
	Number Selection				
K Group	92	79	78	75	73
N-K Group ..	74	63	60	54	56
	Number Identification				
K Group	84	74	69	68	68
N-K Group ..	72	59	52	53	49

Group. Six and seven were considerably more familiar to the six-year-olds who had not attended kindergarten than were 8 and 10. One interesting fact must not be overlooked; groups of 10 were slightly more often reproduced than groups of 8 objects by the six-year-olds of the N-K Group.

In the next test—Number Identification—the teacher laid a group of five objects in front of the child with the question, "How many have I here?" The numbers were again given in irregular sequence, and three trials were made. The percentages of familiarity for each group are smaller than the percentages, for the same numbers on the former test (see Table I). This test must be more difficult than the test of Number Selection.

⁵Through a typographical error 9 was omitted.

The results on these two tests do not indicate necessarily that these percentages of each group know the numbers perfectly. Rather they indicate that the children are on the way to such knowledge. A child's activity with a number is quite different from the highly abstract number concept of an adult. It is a particular reaction to a specific situation. To be sure that a child had mastered any one of these numbers would require many trials in many different situations. The results of these tests indicate, at least, that more than half of the N-K Group and almost three-quarters of the K Group had a working knowledge of these numbers.

Some individual six-year-olds showed great proficiency in handling the numbers. One small boy made seven by dropping two more beads beside the five he had already laid out. He made four from the seven by taking three away. When asked for eight, when four were lying on the table, he said, "You need another four—two fours and eight." Such number facility as this Miss Drummond insists comes from the child's own activity in counting.

Ten addition combinations were chosen at equal intervals from the table arranged by Knight and Behrens, in which the 100 combinations were ranked according to difficulty [10, 17]. Before the choice was made, the zero-combinations and combinations with sums of more than ten were marked off the table. Ten were chosen at approximately equal intervals from those left in the table. The easiest combination in this test, $5 + 1$, was ranked eleventh in difficulty by Knight and Behrens; $3 + 5$, eighty-first. These combinations were presented in problems, all of which were put to the child in the following form: "If you have 5 pencils and get 1 more, how many pencils will you have then?" The percentages given in Table II indicate the portions of each group which answered correctly; that is,

TABLE II
PERCENTAGES THAT KNEW THE SUM
OF CERTAIN COMBINATIONS IN
PROBLEMS

	K-Group	N-K Group
$5 + 1$	78	60
$7 + 1$	72	52
$1 + 9$	59	43
$4 + 4$	39	27
$1 + 6$	56	42
$5 + 2$	48	32
$8 + 2$	49	33
$4 + 5$	24	17
$5 + 3$	39	27
$3 + 5$	29	24
Median	5.4	3.5

the sum of $5 + 1$ was given correctly by 78 per cent of the K Group and 60 per cent of the N-K Group. These decrease to 24 per cent and 17 per cent for $4 + 5$, which to these children is the least familiar of the ten combinations. The order of familiarity for these groups does not correspond to the rankings of difficulty given by Knight and Behrens, for the combinations are listed by difficulty from easiest to hardest in Table II. The median number of combinations correctly solved by the children who had attended kindergarten was 5.4; for the children who had not had kindergarten training the median was 3.5.

The addition combinations used in the next test were chosen in the same fashion as those used in Test 5. The easiest, $2 + 2$, was tenth in the Table of Knight-Behrens, and $4 + 6$ was eighty-eighth. Objects were used in this test. The teacher laid two of the small objects used in the earlier tests before the child and then asked, "How many have I here?" Receiving an answer—either correct or incorrect—she concealed the objects with a card and laid down two more asking the same question. These were in turn concealed with the others and then she asked, "Can you tell me how many two and two are?" If the child answered correctly, his answer was listed in the section "Invisible". If, however, he failed, the teacher removed the card

and said, "See if you can tell me now how many 2 and 2 are!" If he got the correct sum by counting, or some variation of grouping, his record was entered in the section "Visible." If he got the test right with the objects covered, he needed no second trial. In Table III the percentages of the groups that got the combinations correct when the objects were covered are given in Columns 2 and 3, the percentages of those who got the combination right by counting

those with sums of ten or less according to Knight and Behrens, if they were allowed to count. From this we may dare to generalize that more than three-quarters of the pupils who had attended kindergarten and three-fifths of those who had not, when they entered the first grade, could successfully negotiate by means of objects any one of the one hundred basic combinations of additions. About half of the K Group and somewhat less than half of the N-K Group

TABLE III
PERCENTAGES OF EACH GROUP THAT COULD GIVE THE SUMS OF COMBINATIONS WITH OBJECTS

	INVISIBLE		VISIBLE		INVISIBLE AND VISIBLE	
	K Group	N-K Group	K Group	N-K Group	K Group	N-K Group
2+2	75	61	18	24	93	85
8+1	52	35	32	27	84	62
6+1	61	43	25	30	86	73
1+7	60	43	26	31	86	74
3+1	73	66	20	19	93	85
2+4	42	33	41	47	83	80
2+8	41	26	38	37	79	63
2+6	43	26	38	42	81	68
3+7	31	21	47	39	78	60
4+6	30	24	46	40	76	64

the objects are given in Columns 4 and 5, and the two are combined in Columns 6 and 7. When the objects were covered, the sum of the easiest combination was given by 75 per cent of the children with kindergarten training and 61 per cent of the children who did not have this training. When allowed to look at the objects, 18 per cent more of the K Group and an additional 24 per cent of the N-K Group determined the sum, so that 93 per cent and 85 per cent of the two groups eventually gave the correct sum of $2 + 2$. When both methods are combined, the median number of correct sums given was 10 for each group.

Addition we had thought was a school subject, but three-quarters of the K Group and three-fifths of the N-K Group—groups composed of children just entering school—could get the correct sum of $4 + 6$, the most difficult combination of

succeeded in getting half of these ten combinations when the objects were concealed.

Three phases or stages of addition accomplishment were tested here: (1) addition with objects which could be counted, (2) objects presented but concealed when added, and (3) memory of addition combination when presented in problems. Practically all the children were successful with objects; at least one-third of the K Group and one-fifth of the N-K Group got the sum of each of the combinations correctly when the objects were concealed; and about one-quarter of the K Group and one-sixth of the N-K Group knew the sum of any combination when presented in a problem.

The median six-year-old who entered Grade I at Cincinnati in September, 1928, who had attended kindergarten made the following record on this number test: he had a mental age of six

years six months; he could count to 30 by rote, could count by tens to 50, could count 20 objects. He could select 5, 6, 7, 8, and 10 at least once out of three trials, and could name groups of 5, 6, 7, 8, and 10 objects at least once out of three trials. He knew the sum of $5 + 1$, $7 + 1$, $1 + 9$, $1 + 6$ in problems, and could remember the sum of 5.4 combinations of 10 given in problems. He knew the sums of $2 + 2$, $8 + 1$, $6 + 1$, $1 + 7$, $3 + 1$ with objects concealed for addition—about 5.5 out of 10 combinations—and he could obtain the answer of all 10 combinations if allowed to count the objects presented.

The median six-year-old at Cincinnati who had not attended kindergarten had a mental age of five years ten months; he could count by rote to 20, by tens to about 30, and could count 20 objects. He could select groups of 5, 6, 7, 8, or 10 objects from a larger group at least once in three trials, and he could name similar groups of objects when presented to him at least once out of three trials. He knew the sums of $5 + 1$ and $7 + 1$ in problems, and correctly solved 3.5 of the 10 problems. He could get the sums of $2 + 2$ and $3 + 1$ when presented as objects and got 3.5 of the 10 combinations right, but he could get the sums of all the combinations if allowed to count.

Experienced kindergarteners and first-grade teachers have known that some children know a lot about number when they come to school. The contribution this investigation offers is that it gives some idea of the extent of some phases of number knowledge and what percentages of six-year-old children possess them. The test is by no means complete. Tests of other forms of number knowledge—tests of subtraction, multiplication, and division, tests of the understanding of words which convey ideas of quantity, and the like—would be necessary to yield a diagnostic record of the child's knowledge of number.

Remarkable proficiency is shown by about 10 per cent of the group. They,

with little difficulty, could reach the standards for promotion from Grade II-B set in many school systems. At the other extreme is the closely similar portion of the group whose members have almost no knowledge of number—those who cannot count beyond ten either by rote or with objects. Between these two extremes are children of many grades of proficiency in number.

The first implication of this study is that for her own information the teacher should make some check on the child's knowledge of number. Some students of disabilities in arithmetic believe that this early work in number on the part of the child is absolutely essential to his later arithmetical thinking. The complacent person who remarks, "I never could see any sense to arithmetic," may simply be one who did not get this hard thinking about number over when he was three or four years of age. Handicapped by this lack of familiarity he has never been able to understand arithmetical or mathematical relations.

Since the child has an early interest in number, each kindergarten and each first-grade teacher would be wise if occasionally throughout the year she made a simple inventory test of each child's knowledge of numbers. Miss Drummond uses playing cards. For the recognition and naming of number groups she deals the cards one at a time. She keeps note of the numbers recognized at a glance, those which have to be counted, the evidences of grouping which appear, and the time required for the test. When the numbers are recognized with some degree of ease, she deals two at a time and keeps record of the evidences of mastery in addition. At first the child who is just beginning to understand addition will begin to count the spots on the first card with one; later he begins to count from the first card—if he is adding 4 and 6 he begins to count at 5 and counts the spots on the second card; grouping also appears within the numbers added; then later still he

knows the sum of the two numbers without adding. When the teacher gives such a test she will find different combinations at different stages of mastery. An account of a child taking this test at five and a half years is given by Miss Drummond as follows:

I now dealt out the cards two at a time, asking Margaret to add. This test gave very interesting results, as it seemed to mark a breaking away from the concrete.

The first pair of cards dealt out was 10 and 3. The child kept repeating these two numbers for about half a minute; she then had to count, taking three-quarters of a minute in all.

The second pair was 7 and 5. The child counted at once, beginning with 1.

Eight and three, "Eleven". No counting perceptible.

Four and three. "Seven."

Three and two. "Five." This answer was given slowly, as if the preceding activity had been fatiguing.

The next three pairs, 6 and 5, 4 and 5, 7 and 8, were all counted.

Then came 7 and 4. "Seven and four more—seven, and two more—nine, and two more—ELEVEN."

Next 7 and 6. "Seven and two more—nine; seven and three, one more after nine—ten; and one more after ten—eleven; and one more—twelve, and one more—THIRTEEN."

The calculation was done in a whisper without looking at the cards. The final answer came out in a loud triumphant tone [7, 125 ff].

Here were combinations which had to be counted, others which were reckoned by grouping, and others which were instantly recognized.

The second implication comes from the comparison of the records of the two contrasted groups. The children who had not attended kindergarten had learned a great deal of number for themselves. Some of them—though never so large a proportion of the group—could do as much as the children with kindergarten training. Therefore this number thinking seems to be a natural function of early childhood. Since, however, the kindergarten-trained children are as a group more proficient in number than the children without that training, it follows that the incidental sort of instruction given to five-year-olds in kindergarten stimulates

number activity on the part of the child.

There is no implication in this study to urge the inclusion of formal arithmetic in the first grade. But there certainly seems to be many implied suggestions as to ways of instruction in incidental number. Surely with this information possessed by the child, no teacher can afford to overlook any opportunity to direct the child's attention to a numerical relation for which he has the number background or to assist him in his thinking by helping him to find the answers to his questions.

BIBLIOGRAPHY

1. Beckmann, Hermann. "Die Entwicklung der Zahlleistung bei 2-6 jährigen Kindern," *Zeitschrift für Angewandte Psychologie*, XXII (1923), pp. 2-72.
2. Binet, Alfred. "La Perception des longueurs et des nombres," *Revue Philosophique*, XXX (1890), pp. 68-81.
3. Binet, Alfred, and Simon, Thomas. *The Development of Intelligence in Children* (Translated by Elizabeth Kite). Vineland, New Jersey: The Training School, 1916.
4. Buckingham, B. R., and MacLachy, Josephine. "The Number Abilities of Children When They Enter Grade One," *Twenty-ninth Yearbook of the National Society for the Study of Education*. Bloomington, Illinois: Public School Publishing Co., 1930. pp. 473-524.
5. Decroly M. le Dr., and Degand, Mlle. Julia. "Observations relatives à l'évolution des notions de quantités, continues et discontinues chez l'enfant," *Archives de Psychologie*, XII (May, 1912), pp. 81-121.
6. Descoedres, Alice. *Le développement de l'enfant*. Paris: Delachaux & Niestle, S. A. (no date). pp. 7-14, 233-80.
7. Drummond, Margaret. *Five Years or Thereabouts*. London: Edward Arnold, 1921. pp. 119-35.
8. Drummond, Margaret. *The Psychology and Teaching of Number*. Yonkers-on-Hudson, New York: World Book Co., 1922.
9. Filbig, Von Josef. "Untersuchungen über die Entwicklung der Zahlvorstellungen im Kinde," *Zeitschrift für Pädagogische psychologie und Experimentelle Pädagogik* XXIV (1923), pp. 105-13, 156-68.
10. Knight, F. B. and Behrens, Minnie S. *Learning of the 100 Addition Combinations and the 100 Subtraction Combinations*. New York: Longmans, Green and Company, 1928.
11. Stern, William. *Psychology of Early Childhood* (translated by Anna Barwell). London: George Allen and Unwin, 1924. pp. 413-18.

The Building of Social Habits Through an Activity Program

MARJORIE WYLIE

Kindergarten Supervisor, State Teachers' College, San Jose, California

SCHOOL life for the majority of children starts in the kindergarten. Here they learn to enjoy their school work or they build up an antipathy for "going to school". Here they choose their own friends for the first time. Here they discover that in a group they must share themselves, their ideas and material possessions with others. It is a time when many valuable social habits are formed that help in molding the character.

When planning the program in the kindergarten, we have attempted to build up a schedule centered around activities that will develop certain valuable social and moral habits. The formation of such habits as courtesy, thoughtfulness, industry, orderliness, helpfulness, decision, is one of the outstanding aims of the kindergarten teacher. Though the teacher holds her daily program as very flexible, subject to many changes brought about by changing circumstances, the children should feel that there is a daily program closely followed and definitely scheduled. They should feel a keen responsibility to follow it.

The room belongs to the children and every child should have a share in keeping the room clean, rearranging the tables and chairs and preparing the materials for the next period. They enjoy this responsibility and it is as important a part of their early training as anything the kindergarten can give to them. Since the room belongs to the children, it should be decorated with their work. The work used in this way should be arranged at the child's eye level and changed often and kept lovely so that the group will always be interested in their room.

The kindergarten curriculum should develop a right spirit of working and playing together. Learning to share themselves, their materials and playthings is part of this achievement. This result will come about very naturally if there are not enough playthings for all,—only one or two balls for the group so that the child will have to share with his friends. Even though he would rather bounce a ball alone, he will realize for himself that the situation calls for sharing in playing "toss" with someone else. Having only a few cups, pans, and spoons in the sand box will develop little social groups around the box with the children very much unaware of the social change that is accomplished. The same result can be realized in the work room by not having hammer and saws for all carpenters to work at the same time. It is very worthwhile to have the children feel the necessity of "waiting their turn", provided there is not too prolonged waiting.

The construction period, when all work together on the group project, gives not only excellent social development but also a fine opportunity for intellectual development. Many problems will come up that will call for constructive thinking, the sharing of ideas, and the use of trial and error method of solving problems.

When making a chair for a doll house, the legs must be the same length; if not, the work must come apart and be made more perfect. It will have to be a firm piece of work too so it can actually be used. It is possible that the carpenter might be satisfied with a poorly made article but when it is put up for inspection by the group, it will not be accepted and

the opinion of the majority will force him to improve it. Many experiences of this kind will bring better work in the future. When building a train a problem arises in choosing the correct size barrel for the boiler of the engine. This calls for good judgment. Choosing the proper size wheels, after the boiler and cab are put together, calls for further judgment.

A habit of keen observation is also developed, for many excursions will have to be made before a certain piece of work can be completed. The young five year olds who are just entering school have not been very observant of things about them. How many of them have noticed the details in a grocery store—that the string is stored in a large iron cage, that the money is cared for in a cash register and that there are rows and rows of meats and canned goods to be sold. Some of them

do not know the difference between a freight and passenger train. Knowing this, the teacher should allow many opportunities to come in contact with the real thing through excursions.

Work of this type develops a power of sustained interest, for how can a group of thirty children engage in a project for a period of from six to twelve weeks, without being thoroughly interested in it? If the child's goal in the finished unit of work is kept clearly in mind and if a definite progress is realized every day, this interest will never lag.

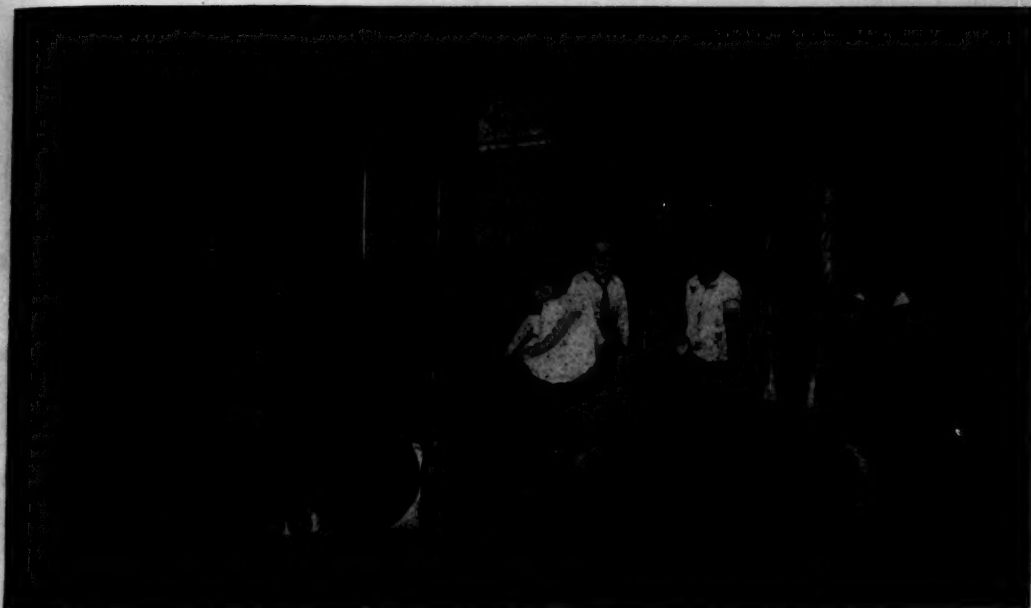
The following pictures are illustrative of several units of work that are profitable to carry on in a kindergarten. The accompanying compositions are the children's own stories and were taken down just as they were dictated by the group.



THE CHILDREN'S AEROPLANE

We used orange boxes for our aeroplane. The boxes are for the seats. It is a biplane because it has two wings. There are wires between the wings to make it strong. Irene Phyllis, and Merry Ruth painted the plane red. Bobby put the wheels on. We all went to the Air Port to see how we could make our aeroplane. It was a very windy day. They had to tie the aeroplanes to the ground so they wouldn't blow away. We have lots of fun playing in our aeroplane. We drive it, start the propeller and then it goes. We fly to San Francisco, Oakland, and Los Angeles. We have a driver. He is a pilot. The rest of us sit and ride in it.

GROUP COMPOSITION, AFTERNOON CHILDREN.

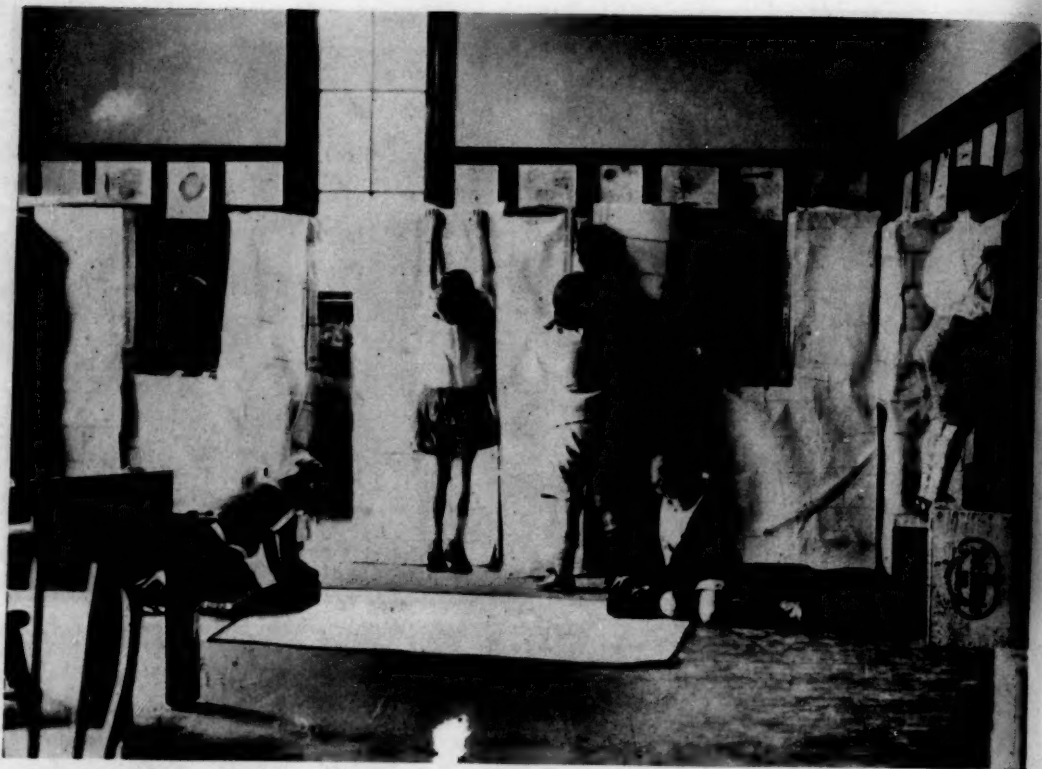


OUR TRAIN.

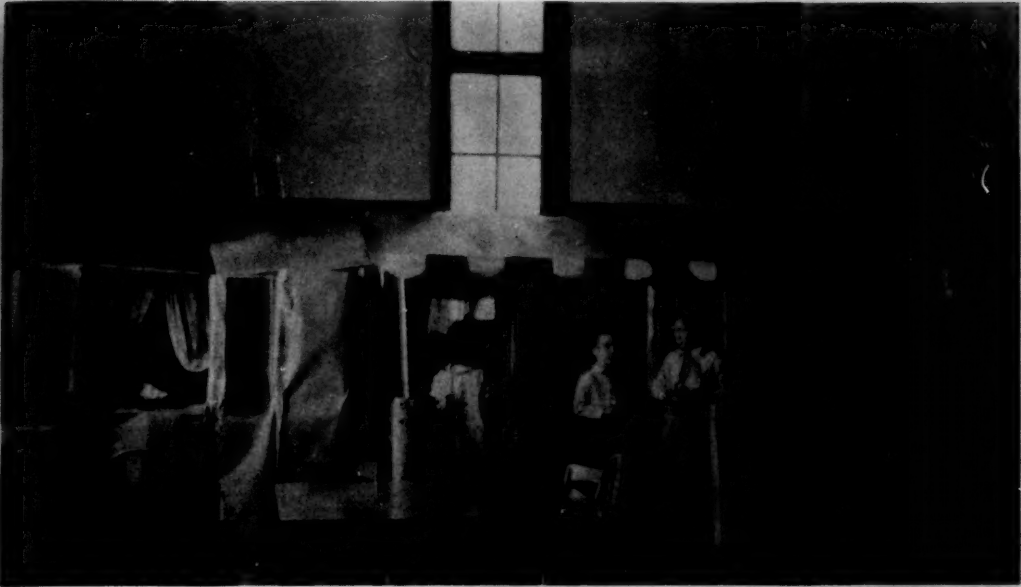
This is the picture of the train that we have made. We are the afternoon children. We used a big barrel for the black engine. The can on the front is for a light so that the engineer can see the track. There is a cow catcher on the front too. The smoke stack is an oatmeal box. Clyde is the engineer and he takes us for long rides. We have two cars on our train. One is the dining car and the other the observation car. These cars are painted red. All of the kindergarten children can go for a ride at the same time.

GROUP COMPOSITION.





ho
It
on
w
B
W
pa
ho

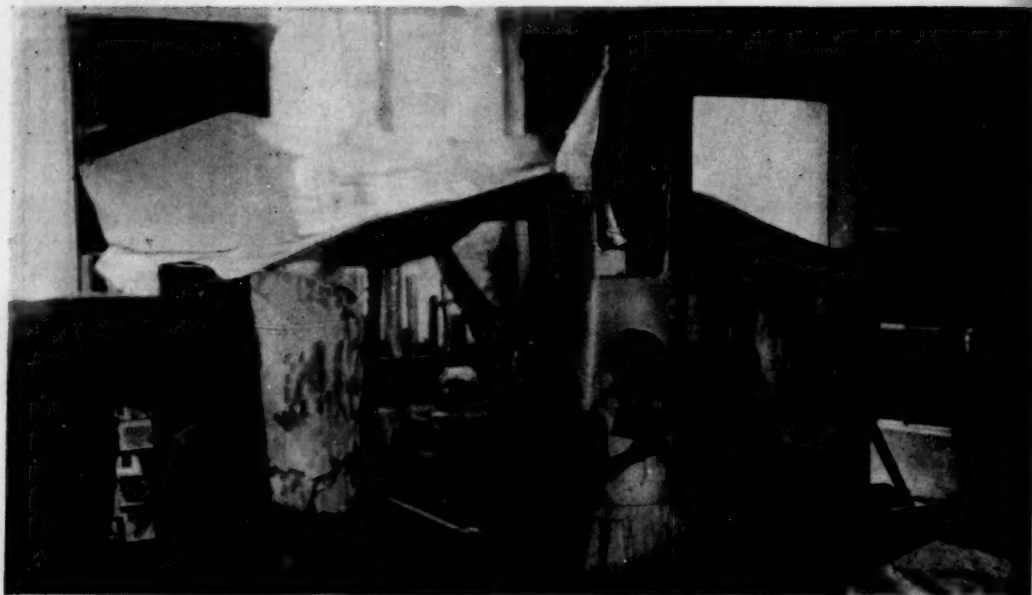


OUR DOLL HOUSE

We have a doll house in the kindergarten room. We made it out of orange boxes. We hammered the boxes together with nails to make it a strong house. It has a paper roof. It is a stucco house. We made the stucco. We put paste on the paper and scattered rocks on the paper. There are two rooms in our doll house. We have two beds in the little room where the baby sleeps. We have a dresser and a stool in our bedroom. It is blue. Bobby made the wall paper. Paul helped make the wall paper too. Our living room is red. We have a piano, chairs, a table and a couch where the dolls sit and talk. Our kitchen is part of the living room. We have an electric stove. We can play that we cook on it. We have some awnings over our windows to keep the sun off. And this is the end of our story.

GROUP COMPOSITION.



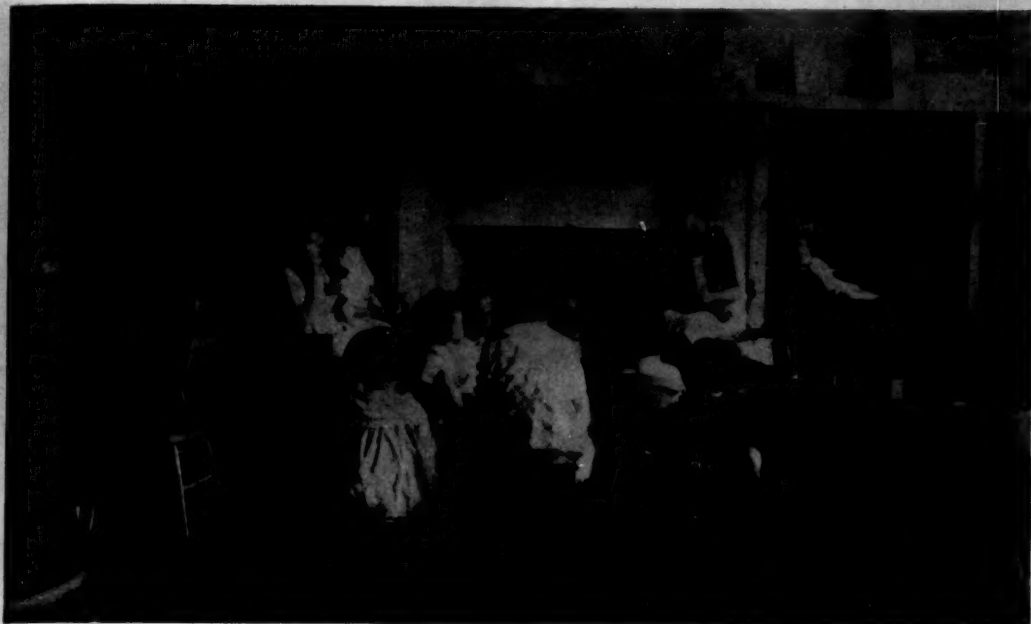


OUR CITY

Last year we built a city. We had a house, a church, a post office, a grocery store. Mrs. Patton's committee made the post office. They had to go down town to see how the real one was made. We all brought shoe boxes to school for the mail boxes. We all had a mail box. On St. Valentine's Day we found our valentines in these boxes. Our post office was painted brown. Some of the other children made the church. Marjorie is playing on the pipe organ and we are all singing songs. We are playing that we are in Sunday School.

GROUP COMPOSITION.

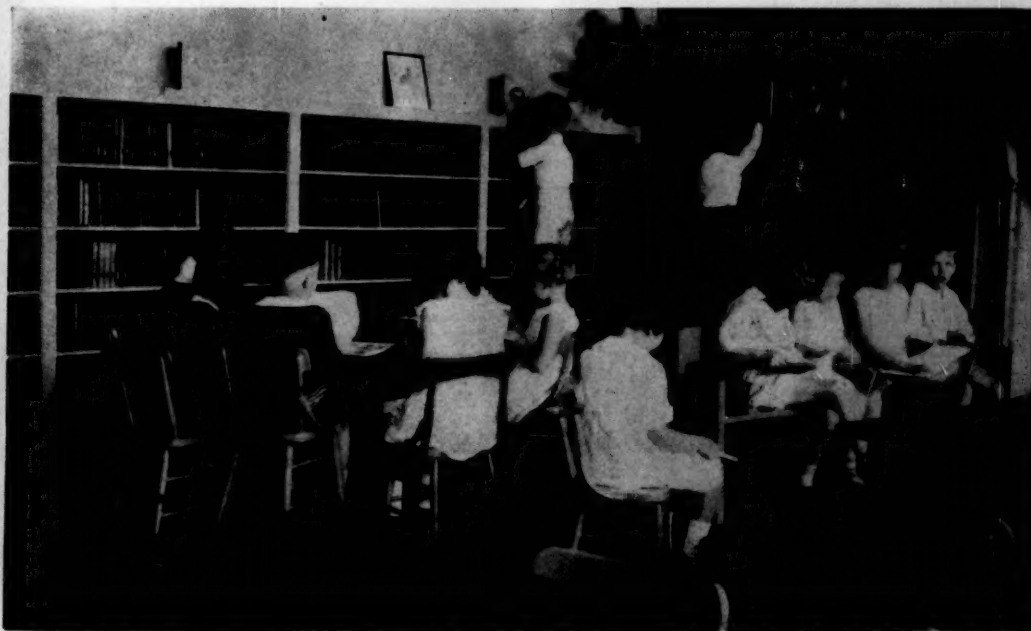


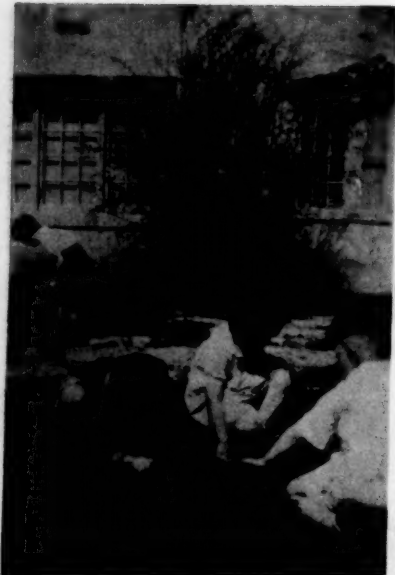


OUR VISIT TO THE LIBRARY

We go down to the children's library to read books. Sometimes we sit at the tables and sometimes sit on the bench. We go every other day. We look at books too. We get our books from the shelves all alone. Nobody helps us. We have nice books in the library. One of the books is Raggedy Ann. We always have a nice time. Miss Strode tells us stories when we are nice and quiet. We sit down on the floor in front of the fireplace. Some can sit on the bench when we are having the story. We will do this when we go into the first grade.

GROUP COMPOSITION.





OUR NATURE WALKS

Once in a while we go on our nature walks. We look at birds and flowers and leaves and sometimes pine cones. We find the flowers in the grass. Some of the flowers are dandelions, daisies, barnyard grass, clover, cheese weed, dog fennel, and shepherd's purse. We put them in magazines. Then we shut them up and put something heavy on them to press them. We put them under a big box. One morning we saw a wood peewee, a swallow, and a sparrow. We found a yellow warbler in the branches of a tree. The wood peewee was on the top branch of a big tree. He flies out and catches insects and then flies back. The swallows go somewhere to get mud and make a mud house up under a roof of a building. The birds get in and the father and mother bring them something to eat. They put soft grass in their house to make the babies' bed nice and soft.

GROUP COMPOSITION.



The Question of Posture

EFFIE PHILLIPS

Department of Education
Western State Teachers College, Kalamazoo, Michigan

POSTURE is an evolving trick. It is elusive. In pursuit of good posture for herself and for her pupils, a teacher must be conscious not only of good posture as such, but also must she have an appreciation of the difficulties which the human body undergoes in achieving integral grace of carriage and conduct. She must also understand the child in relation to situation and must observe faithfully the laws of habit formation, for posture depends upon habit.

Professor Magnus of the University of Utrecht, Holland, says, and his statement is confirmed by several eminent physicians and psychologists, that the body of man was meant to be carried in a horizontal position supported by the two legs and arms as a table is supported by four legs. The internal organs were supposed to be suspended from the spine—as clothes hung from a line. The spine then, was intended to be a girder and not a column. "If," says he, "we would try to balance a light weight window dummy on the hands, we would then get some conception of the problem of perfect balance as exemplified in human posture, the posture expected of and encouraged in the young child." Balance under the circumstances is possible, but not easy of attainment. "If one," says he, "could see all of the muscles at work in the achieving of upright posture of the body, he would see about three hundred muscles working. In the feet and legs alone, approximately one hundred muscles are engaged in active pulling against the bones every instant, in order to correct each little topple. In the back, about one hundred and forty muscles are pulling constantly against the bone projections of the spine. In the chest

fifteen or twenty are acting on the ribs and these in turn are pulling upon the spine to which they are attached. Twenty or more muscles are at work in the neck, keeping the head from dropping over. If any considerable percentage of these fail for even an instant, the body collapses like a leaning tower that falls. This is in very fact what does happen when one faints. The several hundred odd muscles that hold the head, the spine and legs, all relax and the body falls in a heap." In addition to this complicated muscular system or rather associated with it, says Dr. Sherrington, the noted British psychologist, is the nervous system directed and supervised from a single nerve center in the lower part of the brain, well below the thinking levels but still higher than the primitive spinal cord. Thousands of nerve messages are constantly going into the posture center and thousands are coming out in an effort to bring the body back into balance when it tends to topple. An assumed posture, rigid in character is much more exacting of the neuromuscular system than is a moving posture just as it is easier to maintain balance on a moving bicycle than it is upon a still bicycle. It is scarcely to be wondered at that children feel the immensity of their achievement when finally they have attained an upright position. When we appreciate the antagonistic forces which must be brought into active harmony, we are apt to be more considerate of children's problems with reference to body order and balance. The child's development as to posture may then be regarded as evolving from the moving to the static rather than from the controlled balance to the uncontrolled. A child learns how to stand still, how to sit

still as an end—the means to that end having been motion.

The achieving of good posture is not only desirable from an aesthetic point of view, but even more important it is a necessity for the anatomical integrity of the erect position which results in perfect balance also provides the proper depth of the chest thus allowing the lungs to function efficiently, the heart has its own area to itself, the diaphragm is high, and deep excursions of this muscle are possible; the liver is well supported by its ligamentous attachment to the diaphragm; the kidneys are properly supported by fat, muscles and tendons; the abdomen walls are strong and flat and support properly the organs within. If there is faulty skeletal alignment, there is impaired organic action which spells ill health, unhappiness, and lessened chances for mental development.

That good posture is achieved only through the greatest effort has been shown—It goes without saying that so intricate and delicate mechanism as that which makes good posture possible should be watched and tended by skilled mechanics who understand not only the nature of the controls but also the indications of mal-functioning, in order that the child's posture may develop along beneficial lines to himself and consequently to his fellows.

All around us we see evidences of poor body mechanics. Children's bodies are illustrations of the fact that much damage can be done in very short time. Many children of five have round shoulders, prominent shoulder blades, flat and contracted chests, sagging abdomens and flat feet that turn outward. So eager has the child been to imitate the movement of his elders that he has come quickly and without wise guidance to a kind of achievement. The least fault in the achievement of posture in early childhood rather than being cured by growth and maturity is magnified. In this case growth makes the matter worse. Posture must develop along sure lines with no deviations. Prob-

ably most teachers know that children's feet should be parallel in walking, the legs somewhat apart and the toes spread. The weight should be carried somewhat forward directly over a point slightly in front of the ankle. The knees must be easy in their action and the pelvis must tilt slightly backward. The waist must be pulled in and the hips down. The chest must be up without too great a curve in the back. The head must follow the alignment of the spine and the chin must be in. The body must be strong, flexible, and alive in every cell in order that the nervous or direction system may function efficiently. One of the newer emphases with relation to the development of good posture is that placed on the mental attitude of the child. Undoubtedly there is a vital connection between the alert mind and the alert body—between the sluggish mind and the poorly managed, blundering body—therefore it is necessary to build in the child proper importance as to self. The little child's day must hold for him successes connected with his efforts. Without the thrill of success in the emotional life there can be no proper postural response. Many educators now believe that the mental attitude of the child toward his work is at least half of the postural battle.

Because we have to deal with the young child who is gaining at a tremendous rate, we have a greater problem than has the high school teacher. Whatever we do must be done quickly and judiciously. The high powered, fast-moving youngster needs a master hand. We cannot point out to him certain future results of his bad body management. The truth is that he cares not one bit for the future. He is interested only in getting satisfaction out of today's achievements. If in some way he teacher can show him a good time and at the same time make good posture her goal, she probably will succeed. Nagging, scolding and such unpleasant associations in connection with postural advice will not initiate habit. Habits are ini-

tiated only when the child feels the inner glow of desire for the new action. The new task does not have to be easy, but it has to seem worthwhile to him. "Keep your shoulders back" repeated again and again in an exasperated tone gets a kind of result but in reality it achieves nothing in the way of permanence. The reaction when the child is free from an unhappy influence probably does more damage than as though nothing had been said. Plants turned with the light, that grow uniformly in consequence, teach a marvelous truth to adults, but it is quite probable that the little child still thinks of himself as a child and not as a plant. Games, posters and plays may be helpful in several different ways but from a standpoint of initiating habits of good posture in the child himself, are too far removed from his own personality. The best results obtained so far seem to have been obtained either in direct anatomical and biological ways or in direct social ways closely connected with childish activity.

Clinics have given some very real and definite help. Work along these lines was undertaken with a great deal of success by the Villard Center of the New York Diet Kitchen Association as early as 1922. Dr. Josephine Kenyon was attending physician at the conferences. The whole work of correcting posture began with the problem of constipation in babies and little children. Mothers were instructed at the clinic with regard to exercises to be given to the children. The mothers continued the exercises at home, returning to the clinic each week with the children to show how they were giving the exercise. The mothers were so delighted with the prompt results that they demanded more help. It is interesting to note that 75% of the constipated children had faulty posture. Advice was given to mothers as to the children's chairs at home, the adjustment being made with boxes and pillows. Sleeping problems of children were attended to. Foot tracing showed errors in shoes, and so the work

continued. Out of this movement came the establishment of a course in Teachers College, Columbia University, in February, 1928. Other clinics were opened. In every case the mothers, teachers and doctors had definite objectives. Definite remedial exercises and measures were adopted. Mothers from these baby clinics were promoted to pre-school clinics. Clothing, diet, exercise, play and sleep were considered as well as medicinal care and the surgical correction of defect. When defect has been removed, the child must somehow take over the matter of posture for himself. Most students of child nature agree that there is but one gate to success, namely,—that of play. Dr. Richardson suggests a number of delightful plays thoroughly enjoyed by the child as plays, through which certain postural effects are achieved. Playing Crab not in terms of human anatomy but in terms of the crab situation, is not only beneficial for the normal child but corrective for the child with a tendency to round the shoulders, besides, it's heaps of fun. The children lie on their backs, then, raising their bodies on hands and feet, they scuttle about crab-fashion. shoulders are beautifully flattened and the chests lifted up and forward. "Keep the child's back limber, the feet free and the abdomen muscles strong if you would have him walk gracefully," says Marguerite Agniel. Playing Seal is an excellent device. The children lie face down on the floor with legs close together, arms locked behind backs. Tricks which seals play in circuses are recalled and a circus act may be played with a great deal of fun and profit. Raising the heads and chests from the floor accomplishes just what the teacher desires. Playing Duck is most entertaining. Squatting position is assumed with buttocks on heels. Hands are placed on shoulders while elbows are pressed close to sides, like folded wings of the waddling web-footed paddler. A duck race provides a real thrill. The position is conducive to good posture and good

health. Abdominal muscles are strengthened, and flabby, protruding abdomens gradually disappear when the children play Rabbit, using both arms and legs in the hopping movement. Playing Kangaroo, using legs only, brings into play just the right muscles. Imitation of the Roly-Poly toy that can not be tipped over may be imitated by the child, who lies on his back, clasps arms about his knees and rolls about on his back. The Mule who stands on his forelegs and kicks out viciously as the little child said "wid he behin' legs," is a useful model. The roar of the lion results in the squaring and straightening of the shoulders. There is, of course, the need for a lungful of air—the diaphragm moves far down and there is a general good result. The Elephant with high arched back may be imitated if the children walk about on all fours with heads well up. The Crane is a queer old bird and the children are interested in his structure. They may be cranes if they will stand straight on one foot, placing the free leg also straight on a table. Bending over, he tries to touch his raised knee with his head. Row the Boat is a game greatly enjoyed. Seat two youngsters on the ground opposite each other with hands clasped and legs alternating. One leans back in a long and strong pull on his oars as his fellow leans forward and allows him to do so for a moment. The spine is properly stretched and the pelvic tilt is downward in correct position as it should be. The proper development of a child's back and abdominal muscles plays an important part in his walking and balance ability.

Playing Giraffe has a peculiar psychological effect on children in that it causes him to "think high." In consequence he lifts his head in the desired manner.

For the correction of flat feet and the strengthening of normal feet, the Tight Rope Walker affords a good example. Walking a crack in the floor or a chalk line, with both heels and toes in rigid alignment, especially if the inner line of

the feet touch the chalk line at each step, is particularly helpful. Playing Sand-pile is another imaginative game that is of use. The children sit on the floor and pretend to dig down into imaginary sand with the toes, turning the toes forcibly inward and heaping up a pile of sand. The Magic Man is an intensely interesting play. Barefooted, the child picks up one or two marbles with each set of toes. He now walks across the floor with the concealed marbles. Now he sits down and turns each foot up to see where the marbles are.

It is probably neither fashionable nor wise to play soldier. Less emphasis on the soldier interest is probably in keeping with the movement away from war. Whether we take this view of the matter or not, playing soldier results in an undesirable rigid condition of the body, to say nothing of incorrect alignment.

The tremendous interest which children take in indoor and in outdoor apparatus, in vehicles, the fun they have in the sunny sand pile, the joy they seem to get out of moving things, hither and yon, all prove that there is plenty of laboratory equipment for the securing of good posture.

Children's activities, those naturally liked by them, should help educators to see how they may help children to strong, lithe, vital and graceful bodies without too much of the formal and "adultishly" purposeful instruction.

Just a few words about the experiment recently carried on in the Merrill Palmer School in attempt to get some sort of an objective measure for children's activities in order that they might correlate it with the physical and mental development of the child.

Diaries with records of the exact activities of eight children were kept. The mornings' activities of the children with regard both for the activity itself and the exact time spent at each activity were listed. Stop-watches were used. Time and space forbids a complete review of

this experiment, but a few ideas of the work may help when in the field. The time ranged approximately from eleven seconds to twelve minutes and thirty seconds. When the data had been gathered, after much discussion, the investigators decided to group the types of activity under eleven different heads, namely: Indoor Pedal Activity, Free Table Play, Free Floor Play, Circle Activity (Sitting), Circle Activity (Standing), Outdoor Pedal Activity, Outdoor Vehicle Activity, Outdoor Construction Activity, Outdoor Apparatus Activity, Rest Preparation Activity, and Rest Period Activity. Activities under each heading were ranged from one to five according to the intensity with which the activity was undertaken and children were scored accordingly.

Obviously the degrees of activity for the different groups are not comparable. A rating of three for indoor pedal activity does not denote the same expenditure of energy as does the same expenditure of energy of three for outdoor pedal activity. However, the ratings of different children for the same type of activity are comparable.

The experimenters found that the temperaments of the several observers who kept the diaries colored the records. However, sixty-three, three hour observations recorded in graph form, indicate that the method is fundamentally satisfactory for studying activity, although no doubt many improvements will be suggested.

Miss Sweeney, Miss Hejinian and Miss Sholley of Merrill Palmer School are responsible for this interesting investigation.

Anything that will help to bring to little children a harmony of body, mind and soul will gratefully be accepted by

sponsors of early childhood.

For a large part of the material used in this article, the writer is indebted to certain articles by Dr. Frank Howard Richardson, Marguerite Agniel, Rosamond Praeger, Harriet Wilde, Merrill Palmer School workers; George Stafford of the University of Illinois and Dr. Gesell, but most of all to the children themselves who constantly furnish stimulation for research.

In closing, I call your attention to a pleasing little poem by Grace Glanbitz in *Hygeia* for April, 1930—two verses of which seem particularly applicable to my subject. It is called:

THROUGH THE DAY WITH NANCY

I stretch from
Feet to fingertips
And turn my neck
And twist my hips
And yawn like this:
Ha hum—ha, ho,
And dig the rug
With every toe;
Cause stretching loosens
Every knot
I love to stretch
An awful lot.

My sweater looks
So well on me
Because I stand so
Straight, you see.
I hold up high
My chest and chin,
And try to keep
My tummy in.
If you can be
As straight as that
You too should wear a
Soldier Hat.

Book Week will be observed November 16th to 22nd, 1930. A Manual of Suggested Projects for Book Week can be secured from the National Association of Book Publishers, 347 Fifth Avenue, New York City.

The Cafeteria as an Integrating Activity

ELGA M. SHEARER

Director of Elementary Education, Long Beach, California
and

BLEND A BUTTS

First Grade Teacher, Willard School, Long Beach, California

NOTE:—The unit of work described in the article which follows was carried out in the first grade rooms under the joint guidance of Blenda Butts, Helen Langsford, and Frances Wyss—first grade teachers in the Frances E. Willard School, Long Beach, California.

WHEN one is six years old, it is no easy task to purchase a lunch in a school cafeteria where three hundred other children are equally eager to satisfy their hunger. It was an endeavor to help the 1B children to meet this new experience adequately, that their work for several weeks was centered about a play cafeteria.

To the children, it was a joyful adventure leading them alternately from the world of reality to that delightful land of make-believe. To the teachers, it was an opportunity through which they could help the children to gain an understanding of the purchasing power of their money; ability to select a wholesome, well balanced lunch; insight into one of the important aspects of community life; better social adjustment through living and working together; and finally skill in the use of those tools of learning that have long been recognized as fundamental in education.

Before the children made any definite plans, they took excursions to the school and Y. W. C. A. cafeterias. With this background, they decided what they would like to have in their cafeteria, and each child chose the part he would like to contribute. Then out of packing boxes, crates, scrap lumber, tin cans and wrapping paper, a miniature cafeteria began to appear. For weeks, the construction of this cafeteria and the play in it were the absorbing interests. The work culminated in a Christmas party for the mothers. The

children planned a program and presented it in the auditorium. Then they served from their cafeteria, cookies and orange juice which they had prepared.

Many teachers still hesitate to use an integrating activity of this type for fear the children will not make the desired progress in the traditional school subjects. If we will stop to analyze this very normal life situation in which these children were engaged, we will see that it involved many of these skills which the public schools feel responsible for giving the children. As evidence of the truth of this statement the following outline is given. It indicates the opportunities which the activity offered for growth in each of the skill subjects.

Reading.

- a. Fifteen experience stories constituting a record of the work were composed and read by the children.

Examples.

Our Trip to the Y. W. C. A. Cafeteria

We went to the Y. W. C. A.
Cafeteria.

We went on the bus.

We saw everything.

They gave us some cookies.

Our Cafeteria Food

We have good food in our cafeteria.

We have milk and orange juice.

We have soup and salad.

We have vegetables and fruit.

We have bread and butter.

Our Christmas Party

We are having a party for our
mothers.

We want them to see our cafeteria.

We want them to see our Christmas tree.

We want them to see our band uniforms.

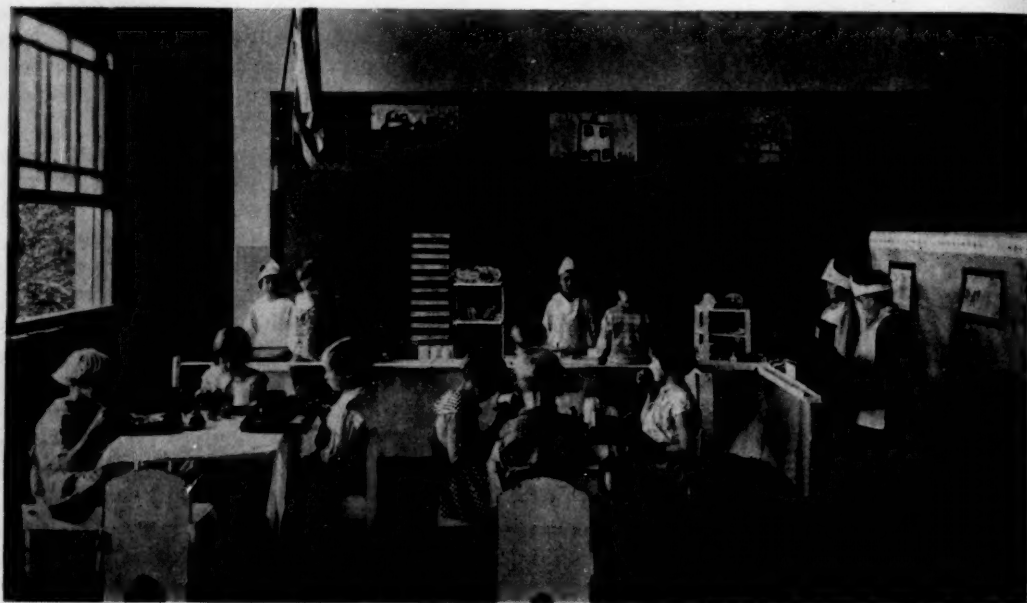
We want them to hear our band.

- b. Plans for our cafeteria were printed on a large chart, referred to, changed occasionally, and read frequently.

c. A clock was made for the kitchen.

d. There was much counting. The number of trays in the cafeteria; the number of plates, napkins, and cups needed for the party; the number of ice cream cups, salads, bottles of milk, etc., were all noticed.

e. Cost of food was printed on the



THE PLAY CAFETERIA AND KITCHEN

- c. The kinds of food we served and the price of each were printed on the "sign board".
- d. The hot and cold faucets on the sink were labeled.
- e. Cafeteria pictures and free illustrations of the children were labeled.
- f. Stories of our cafeteria were printed in the school newspaper and read by the children.
- g. Invitations to our party were composed by the children, read, and then taken to the mothers.
- h. Requests and thank you letters were sent to the people who helped us.

Number Experiences.

- a. Money was brought for the bus fare.
- b. The time the bus would call for us was discussed.

menu list.

- f. The cost of the stamp to send a letter was discussed.
- g. Measuring was involved. Inch, foot and year as measures in constructing cafeteria. Number of quarts of orange juice. Number of quarts of water added to orange juice. Teaspoon, cup, half cup, and tablespoon as measures in making the cookies.
- h. Numeral terms were used in discussing the work, such as: longer-shorter; larger-smaller; higher-lower; heavier-lighter; as many as; more than; the same as, etc.
- i. The day, month and year were written in the headings of the letters.

j. Numbers were printed on the cash register.

k. Toy money was used in the cafeteria.
English.

- a. There were many opportunities for oral expression; for example, during
1. group conferences.
 2. work periods.
 3. excursions.
 4. play periods.
 5. discussion with friends and parents.
 6. private conferences regarding work being done, plans contemplated, etc.

Examples of topics discussed:

Plans for trips to cafeterias.

Things we saw on our trip.

Things we needed for our cafeteria.

Difficulties encountered during work—and help that can be given.

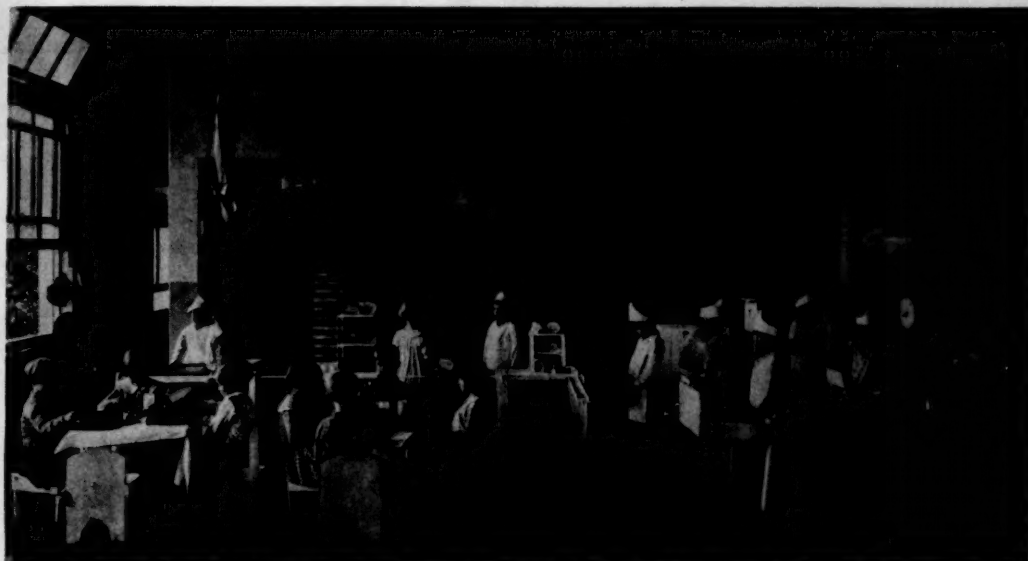
Foods that are good foods.

Ways we can make our cafeteria more beautiful.

- b. Four letters were composed and mailed to people who helped us.
- c. Invitations were composed and taken to mothers.
- d. Program for party was planned and presented by children.
- e. Words were added to the children's vocabularies; e. g., steam table, menu, desserts, courteous, polite, refrigerator, sewing counters, sliding rail, cashier, border, stencil.

Fine Arts.

- a. Original drawings to illustrate records of work.
- b. Designs for the dishes.
- c. Original pictures and border designs for the wall.
- d. Stencils for decorating furniture.
- e. Original Christmas tree stencils for invitations.
- f. Clay used in making vases for tables



ENJOYING A MEAL SERVED IN THE PLAY CAFETERIA

Foods that are salads.

Foods that are desserts.

Ways we can make our dishes more beautiful.

fruit

ice cream.

g. Flowers for tables.

h. Christmas tree for party decorated.

Industrial Arts.

- a. Woodwork.
Menu board; trays; knife, fork, and spoon; trays; shelves for salads and desserts; serving tables; steam tables; sliding rail; cash register; tables and chairs; rack for caps and aprons; stove; clock; kitchen table; cupboard; sink; refrigerator.
- b. Cutting.
Food for cafeteria.
Knives, forks and spoons.
Patterns for caps and aprons.
Cutting material for caps and aprons.
- c. Sewing
Caps and aprons.
Tablecloths.
Towels for drying dishes.
- d. Preparing food.
Making cookies.
Preparing orange juice.

Music.

- a. Learned songs to sing for guests.
- b. Play in rhythm band.

Health Education

- a. Recognition of healthful foods.
- b. Ability to choose a good lunch.
Choose from
 - 1. milk.
 - 2. a hot dish.
 - 3. a fruit or vegetable.
 - 4. bread and butter.
- c. Habits of cleanliness.
 - 1. Washing hands before eating.
 - 2. Handling food with care.
 - 3. Keeping everything in cafeteria clean and attractive.
 - 4. Wearing clean caps and aprons when handling food.
- d. Habit of eating food slowly and chewing it well.

Safety.

Using only play matches for stove—

discussed reason.

Sitting still on the bus.

Taking care in crossing streets.

Protecting selves and others while working.

Character Education.

- a. Courtesy.
 - 1. Waiting turn politely.
On bus; in cafeterias; in play.
 - 2. Sharing tools with others.
 - 3. Helping others with their problems.
 - 4. Choosing foods quickly so others will not have to wait so long.
 - 5. Conversing quietly while eating.
 - 6. Listening to the one who is talking.
 - 7. Being courteous when playing in cafeteria.
- b. Perseverance.
Completing work begun.
Being willing to begin again after having failed.
- c. Cooperation.
Working together for common aim.
- d. Neatness and orderliness.
Keeping cafeteria attractive.
Caring for work, tools, materials, and room.
- e. Thrift.
Avoiding waste of time and materials.
- f. Clear thinking.

Many opportunities to plan, execute and judge results of work.

As we stop to look into the worth of this freer type of work and see that growth in the so called fundamental skills does come, fewer will hesitate to break away from the formal type of organization and give the children the all around development that results when they are encouraged to investigate, to initiate, to plan, to experiment and to judge.

The White House Conference on Child Health and Protection will be held in Washington, D. C., November 19-22, 1930.

The November issue of *Childhood Education*, released October 20th, will contain the full program.

Providing for Immature School Entrants

A Report of the Research Committee of the California Kindergarten-Primary Association for 1928-29

KATHERINE L. McLAUGHLIN

Chairman, Sub-Committee, Primary School Research

During the year 1927-28 the Research Committee carried on two investigations in the field of early child education. These investigations were reported at the meeting of the association held in Sacramento, November 30-December 1, 1928, and were published in separate pamphlets under the titles *Nursery Schools in California* and *First Grade Readiness and Retardation*. The nursery school study was made by a sub-committee of seven under the chairmanship of Helen M. Christianson and dealt with four phases of the problem viz., (1) the young child's needs; (2) the essential features of an adequate environment for meeting these needs; (3) scientific research and experimental activities and procedures in nursery schools; (4) co-operation between nursery school staff and parents in meeting the child's needs.

The investigation of readiness for first grade and its relation to the large percentage of non-promotions in first year was carried forward by a sub-committee of fifteen with Katherine L. McLaughlin as Chairman, and reported in the following sections: (1) causes of non-promotions in the first grades of the California schools; (2) determining first grade readiness in a group of Los Angeles schools; (3) procedures used with first grade entrants in San Diego; and (4) a survey of procedure with first grade entrants outside of California. From the year's study of the problem certain significant conclusions were reached among which should be listed the following:

1. that the largest percent of failure for all grades was in the first grade;
2. that a detailed study of approximately 2,000 first grade entrants in Los Angeles and San Diego showed the outstanding cause of non-promotion to be mental immaturity not necessarily low intelligence—simply a mental age too young to acquire reading skills;
3. that a state survey (including data for 1928 low first grade pupils) indicates that a large per cent of the "non-promotions" were too young to attempt beginning reading at the time of entrance into the grade; that many were further handicapped by low intelligence, poor attendance, language difficulties, and undesirable home conditions;
4. that in the state as elsewhere the child's readiness for promotion was being determined practically entirely by teachers' judgment unsupplemented by objective measures;
5. that homogeneous grouping of first grade entrants with differentiated programs to meet group needs reduced very considerably the per cent of non-promotions;
6. that a preliminary study of the curricular needs of pre-first grade pupils stressed the value of activities of the non-reading type;
7. that kindergarten training be extended to all children in the state to insure a more adequate language and experience background prior to first grade entrance.

DURING the past year, 1928-29, each sub-committee continued the investigation of the same general problem, undertaken in 1927-28. The report of the first sub-committee presents the progress of the nursery school movement in California studied in its relation to the college, the public high school and the kindergarten. The complete report is appended. The second sub-committee reports a summary study of pre-first grade classes established in eight California cities. This report follows.

Section 1. Pre-First Grade Classes in

Eight California Cities:

The problem for this year's study grew directly out of the conclusions reached by the previous year's investigation. Having found that mental immaturity was the outstanding cause for a large per cent of non-promotions in the first grade it was decided to make a study of certain school situations where this factor influenced the grouping and training of first grade entrants.

The material for the study was contributed by supervisors and teachers in eight California cities who gathered the

¹ Pearl Crawford, Rebecca Earle, Barbara Greenwood, Lynette Mass, Elizabeth Pell, Margaret M. Roberts and Helen M. Christianson, Chairman.

² The committee was composed of the following members: Caroline Armstrong, Department of Psychology and Educational Research, Los Angeles Public Schools; Emma Baldwin, Assistant Superintendent, San Diego City Schools; Jane Bernhardt, Kindergarten Training Teacher, University of California at Los Angeles; Ethel Britto, Supervisor, Department of Kindergarten-Primary, Los Angeles Public Schools; Vivian Evans, Supervisor, Riverside County; Mrs. Leo Gamble, Principal Palms School, Los Angeles; Frances Giddings, Supervisor of Training, University of California at Los Angeles; Bertha A. Hall, Associate in Physical Education, University of California at Los Angeles; Edith Hammack, Training Teacher, San Diego State Teachers' College; Marre Manlove, First Grade Teacher, Long

Beach; Julia Melton, First Grade Teacher, Pasadena; Ethel Van Deusen, First Grade Teacher, Los Angeles; Elsie R. Rose, Kindergarten Teacher, Beverly Hills; Agatha Kirby, First Grade Teacher, Los Angeles; K. L. McLaughlin, Chairman, Associate Professor of Education, University of California at Los Angeles.

³ Fresno, Nell Hamilton, Primary Supervisor; Long Beach, Ella B. Howell, Junior First Grade Teacher; Los Angeles, Madeline Voverka, Supervisor, Division of Kindergarten and Primary Grades; Oakland, Ida Vandegaw, Director of Activities Program and Reading in Primary Grades; Pasadena, Nancy Milligan, Supervisor, Elementary Grades and Kindergarten; Sacramento, Rose Sheehan, Supervisor, Kindergarten-Primary Department; San Diego, Emma Baldwin, Supervisor, Primary Grades; San Francisco, Florence Winter, in charge of Kindergarten-Primary Grades during leave of absence of Director, Julia T. Hahn.

data for their respective localities. The data have been studied under the following headings, (1) outstanding administrative problems in establishing classes for immature school entrants; (2) types of curricular activities used; (3) results obtained; (4) conclusions of teachers and supervisors regarding the value of homogeneous grouping of first grade entrants.

Outstanding problems—While there are some slight differences in emphasis due to local needs, in general all eight of the cities reporting have similar problems. All recognize without question the need for special classes for immature school entrants. In the different cities the classes are variously designated. In San Francisco they are called Junior Primary; in Los Angeles they are known as Transition Group; San Diego uses the term Pre-first; other places call such classes the minimum or Z groups.

In some cities the problem of the immature school entrant is more acute than in others. One section in Los Angeles reports that out of a group of 475, 125 or more than 26 per cent tested below six years mentally.¹ In San Diego for the city as a whole 20 per cent of all entering first grade children tested less than six mentally.² Fresno reports 19 per cent below six year mental age. Similar data were obtained in the first grade state survey made by this committee last year.³

Other problems common to the eight cities contributing data to this year's report include the following:

1. The present school entrance law that permits children chronologically six to enter first grade regardless of mental and physical maturity;
2. Adult opposition to deviations from traditional ways of teaching six year olds as expressed by some parents and even by a few teachers and prin-

cipals;

3. Conflicts with established methods of classification of school population;
4. The large number of individual differences within the pre-first groups.

Although our present school entrance law is based on chronological age only this limitation has not prevented our progressive school systems from finding a way of meeting the entering child on the level of his needs. Nor has it inhibited the planning of curricular and other activities that let him live in a world of rich meanings where many possible avenues of growth and self expression are open to him. In Oakland at the end of the first month of each semester, pre-first grade classes are formed for those "who are not yet ready to do low first grade work" . . . No child, however, is "permitted to remain in pre-primary more than one term without permission of the Bureau of Curriculum Development." In San Francisco the "Junior Primary is regarded as an adjustment class where the child is prepared to successfully meet the work of the first grade. It is a class for children who test less than six years of age mentally or who are physically unable to adapt themselves to beginning first grade work." Los Angeles for some time has had minimum, regular and maximum requirements for B1 pupils. The superintendent's Bulletin No. 30 for March 19, 1929, announces that, "Since the majority of the minimum groups are composed of these immature children, the name 'tradition group' will be substituted for 'minimum group'. These classes are thus designated for the purpose of emphasizing the adaptation of instruction to the minimum groups of B1 class, which consist largely of children, who because of their immaturity, cannot complete the required work of the grade in one term." Miss Veverka adds, "Sometimes these classes have to be established before the children have had psychological tests, in which case the teacher groups them tentatively on her own judgment. As soon

¹ Third Yearbook, Department of Psychology and Educational Research, Los Angeles, City School District—pp. 98-101.

² First Grade Readiness and Retardation, Research Committee, California Kindergarten-Primary Association, 1928—p. 25.

³ Ibid., p. 15.

as possible the counselor verifies this grouping by tests." Fresno and Sacramento follow a similar plan.

It is evident from the above excerpts that though the law for school entrance admits these immature six year olds it does not interfere with their segregation into special classes for differentiated developmental training needed before beginning regular first grade work.

The second outstanding problem reported is that of opposition on the part of parents, teachers and principals to the informal experiential type of training given to six year olds because it differs radically from the traditional teaching at this level. One city reports that, "Parents often take it as an affront or insult if a child six years old is not given reading and we have no little trouble in explaining this situation to them. Sometimes they even take the child out of school and put him into schools where it is guaranteed to them that the child may take up reading." Another says, "Most parents and many teachers conceive of education as learning the subjects rather than as child growth." A third hopefully sees the situation, "Parents are gradually becoming aware of the function and value of such grouping through conferences and P. T. A. meetings and discussions."

It is frankly admitted that there are some teachers and principals who need to see the functional value of pre-first grade work. One supervisor believes that "Many teachers have not had the training or the point of view for giving these children the kind of experience they should be having. It is difficult to get the traditionally trained teacher who has a narrow idea of methods, to adopt other procedures than emphasis upon 'subject-matter'. Notwithstanding the fact that such teachers recognize the difficulties of teaching reading to children unready for it, they see in it more objective results than they are often able to see in other procedures." Another offers an explanation of this pedagogical standpatism: "Teach-

ers feel that the state law requires that programs be stated in terms of 'subject-matter' and that under the law all pre-first classes would have to be classed as retarded in the annual state report." Furthermore, "principals hesitate to report so large a percentage of non-promotions and push the children on into the next grade even though they are not ready for the work."

Another hazard in the path of the progressive primary teacher and supervisor is that of the special subject supervisors who demand that their courses be taught to all and that their subject be given its full time. One teacher reports that, "In the beginning we worked under a definite time allotment to subjects but this left us no time for activities!"

Convincing the school board and the administrators of the need for richer environment of materials in the lower grades records another form of opposition. Again as in the matter of overcoming the shortcomings of the school law, the battle with the adult opposition has been won not by hostile agitation but by peaceful penetration and parents have been encouraged to visit. Board members, principals, teachers and parents have been encouraged to visit these classes at work. In many cases they have come, they have seen and in some instances they have been converted to the philosophy of the new education.

Conflicts with established methods of school classification and organization is given as a third major problem. In one overly emphasized three-track system the immature as well as the language-handicapped first grade entrants are all placed in the minimum or Z group. In another situation we are informed, "The first grades are always crowded, ranging from 40 to 45. These large classes make it hard for inexperienced teachers to attempt innovations." We learn further that "A great many of the schools have but one first grade and that the schools are so located as to make a divided session impossible to administer. This necessitates

taking care of pre-firsts in the same room with the regular firsts. Smaller schools usually have second graders in the same room with the firsts. This complicates the problem of segregation of the pre-firsts." San Francisco has eight Junior Primary Classes and sixteen mixed classes, i e., classes in which both Junior Primary and 1A pupils are enrolled. Here it is found that "Most teachers prefer having a Junior Primary group segregated but some feel that the 1A with the Junior Primary stimulates the Junior Primary to greater effort. In thirteen of the mixed classes the kindergarten teacher works with the Junior Primary group in the afternoons. This leaves the other teacher free to stress reading and writing with the 1A group and gives the Junior Primary pupils more experience with work on their own level."

The fourth and last problem mentioned by all eight of the reporting cities is that of the wide variability among the individual difference of the pre-first grade groups. Differences are legion. Some are mentally immature, others are under-developed physically. Some carry both these handicaps along with peculiar personality defects that stubbornly resist modification and elimination. The immature mentally are characterized thus:

Short interest span; tends to be playful and inattentive;

Lacks sense of responsibility and ability to concentrate;

Lacks perseverance—does not want to finish task started;

Lacks self reliance—depends too much on teacher or others;

Lacks initiative; tends to imitate others; very susceptible to suggestion;

Lacks ability to follow out directions or to carry out orders; slow to grasp ideas;

Lacks background of common experience;

Lacks muscular coordination—inability to work with tools or materials.

Among the physically unready are found bad health habits induced by malnutrition, infected tonsils, bad teeth and

lack of regularity in food and sleep habits. Personality limitations are often evidenced by inability to make adjustments to the group and by certain types of emotional instability such as shyness, timidity, feeling of inferiority, fears of all sorts, unsocial attitudes, and constant restlessness. Lack of adjustment to the group is indicated

By a tendency to self importance,

By an inclination to selfishness,

By an unwillingness to respond to discipline,

By a tendency to annoy or to quarrel with others,

By an inability to work well with others.

A few of the variables listed under language difficulty include the following:

Speaks a foreign language;

Speaks English but hears foreign language at home;

Uses baby talk;

Has a limited vocabulary;

Has difficulty in expressing ideas coherently;

Has difficulty in keeping to a point;

Has hurried mode of speech that causes laxity in word endings.

While the above presents only a mere listing of the variations in physical, mental and personality limitations, it is well to bear in mind that few of these are met in isolation. The teacher must deal with the child handicapped by personality defects who may also be undernourished and immature mentally. Indeed in each child it might be said different combinations of variables are represented. Enough has been said however, to indicate that the teaching situation is one that requires superior insight, skill, and a sympathetic understanding of child-training rather than expertness in subject teaching. An appreciation of this requirement is sensed in such statements as the following: "There are many things to be worked out but those of most importance are a better selection of teachers and a constantly enriched curriculum." "Another procedure has been to push up to higher grades the

older more traditionally trained teachers who are not variable enough to adjust to the new demands. In their places teachers who have not developed set techniques are being tried out." One city system selects teachers trained and experienced in kindergarten and first grade work who are in sympathy with the movement and who understand the needs of immature children. The whole matter is well put in a bulletin issued by the Department of Kindergarten-Primary Education of the Los Angeles City Schools. It is an old adage that "As is the teacher so is the school." What shall we hope for her?

1. She must have a sympathetic attitude toward this form of grouping;
2. She must read. She must know scientific method;
3. She must see possibilities in children and possibilities also in situations and materials;
4. She must be resourceful;
5. She must be willing to suspend judgment; to question procedures, to keep a record of what is going on; to discriminate between and among instruction, activity, drill, test, outcome and such other terms as are necessary to designate what is going on in her room;
6. She should have a good speaking voice, and be clever with her hands in making things with and for the children;
7. She respects habits as an outcome both in her own education and in that of her children;
8. She will seek help and conference on definite problems that occur; and she will make fine distinctions between the essential and the non-essentials in teaching;
9. She is committed to a program of activity, of experience, of concrete materials, and the building up of rich backgrounds, of meanings upon which a rich reading content will be growing;

10. She will not hurry the children or impose meaningless things upon them. By deferring books for a time she is building a strength and an attitude which will enable them to get more from their reading when they do take it up.

To sum up—we have considered four significant problems met in the establishment and development of pre-first classes, viz., the present school entrance law, the opposition of adults to deviations from traditional methods of teaching six-year-old children and lastly the wide variability among the children forming these groups and the type of teacher needed for this important training.

Types of Curricular Activities:

What are the surroundings in which these children are placed and what are the activities in which they participate? In some cities the housing is similar to that of our best kindergartens, others, as in San Francisco, have transformed the formal primary room into a veritable work shop. Porches, verandas and play courts add additional space for large units of work. Equipment includes a shop bench with tools for making large things; lumber both from stock and scraps of discard; materials for play house activity—rugs, dolls, furniture, toys, and screens (some of these things are made by the children); improvised easels for large sheets of paper; a good supply of bright colored well mixed calcimine, and plenty of big brushes; garden tools; building blocks; live pets; toy animals; pictures and picture books; large jar of clay ready for use; a box for such discard material as empty spools, small wooden boxes, film and typewriter rolls, milk bottle tops, string, scraps of clean cloth, yarn, round smooth can-lids for wheels, corks, and the like. These are a few of the many kinds of material brought in to meet the needs of the wide variety of activities carried on in these classes that are freed from what Rousseau called the "scourge of childhood". He must have had in mind reading as

the scourge of the child who is not ready for it.

The activities are largely of the non-reading type, though some of the reading type are included as the need develops. Non-reading activities found most satisfactory with the pre-first classes of San Francisco include:

1. Developing units of work—making representations of boats, trains, farms, doll house, and the like;
2. Playing in completed unit;
3. Playing in doll corner;
4. Working with clay, paints, crayons, wood, paper, cloth;
5. Playing in the orchestra or singing with children;
6. Painting pictures that tell stories;
7. Giving parties or entertainments;
8. Taking care of the room and materials;
9. Taking care of the animal pets;
10. Decorating the class room for a party or entertainment;
11. Telling, listening to, or dramatizing stories, poems or songs;
12. Taking walks around the neighborhood and talking them over afterwards;
13. Looking at picture books;
14. Having simple puppet shows;
15. Making picture books.

In San Diego large units of work are frequently undertaken such as constructing a play house out of a packing box and equipping it completely by painting the house, papering it, making the furniture, rugs, curtains, bedding, and clay dishes; "They dress the doll, care for the house and play in it with much genuine pleasure." Other units include fruit and vegetable market, flower-shop, a zoo, a small garden, crude but unmistakable automobiles, air-planes, busses, trucks, and similar ambitious enterprises.

The method consists of a program of large activities that requires purposing, planning and judging on the part of the children. Later in the term when the children have had many compelling experiences units of reading may grow out

of their own activities. But reading from a text is discouraged except for children who have shown unusual growth and ability. Sometimes the desire to read is awakened by listening to stories read, or perhaps by looking at picture books, or by making picture booklets, or by the teacher's reading from books that the children have brought from home. Towards the end of the term such reading activities as the following are usually introduced:

- (a)—Reading books with large illustrations and little printing;
- (b)—Reading class-newspaper or announcements on the bulletin board;
- (c)—Reading stories composed from their own experiences;
- (d)—Looking at pictures in a balopticon or a Keystone View set and writing names on top of the objects projects on the blackboard or white screen.

Results: In Los Angeles it was found that "practically all of those children who entered B1 with a mental age of 76 months succeeded in being promoted to A1." In 28 schools there were but 13, or 5 per cent, who failed. "Each case was investigated and found due to illness, absence, late entrance, etc." This showing is indicative of what can be accomplished when the mentally immature are segregated. In San Diego non-promotions were reduced from thirty to five per cent. Miss Baldwin states that, "The children of pre-first are happier, develop more initiative, and progress more steadily when segregated from the regular first grade groups. Such grouping gives the child more time to make necessary adjustments." Miss Milligan points out that "The field of experience has been enriched; the range of interest has been increased; vocabulary has been given meaning and a general period for development has been of inestimable value." The following excerpts are taken directly from the written reports of Junior Primary teachers in San Francisco: "Ten children out of twelve Junior Primary children went into low second grade at the end of one year. No time was lost." "Five out

of eight made 1B after six months in Junior Primary." "Three out of five children promoted to 1A after two weeks in Junior Primary are doing outstanding work." "The children who have had Junior Primary training are socially better adjusted. Promotion seems to have given them the satisfaction of success." "Children with Junior Primary training are eager and interested. They get 'under way' much sooner than the group that has not had Junior Primary training. Many of the children who have had Junior Primary training show promise of eventually making up time spent there by going through the primary grades at greater speed."

Conclusions: While this experiment has not gone far as yet and though it may be too early to state conclusions it is worth while to note that one keenly observant supervisor states that the "effect upon these groups is less strain, more opportunity for socialized activities, more opportunity for socialized language and a much freer type of discipline, happier teachers, because they feel they do not need to force the children, and all together a much more wholesome primary department."

Miss Winter finds such values as the following in pre-first training:

- A. "It postpones teaching of reading until the child is ready;
- B. It builds up a background of experiences that prepares the child for reading;
- C. It provides atmosphere and environment that is adaptable for the child who has no kindergarten training and whose home environment does not prepare him for first grade work;
- D. It eliminates repetition of 1A work and avoids discouragement;

E. It gives opportunity for more individual attention;

F. It provides much opportunity for real oral expression;

G. It makes allowances for slow progress."

Miss Van Vandergaw looking at the experiment conservatively and yet philosophically concludes that "Whether the pre-primary grade for small groups meets the requirements better than some other solution, we have not had enough experience to determine. But in view of what psychiatrists tell us of the serious and lifelong harm resulting from requiring children to undertake work that entails failure, any plan whereby the child is given an environment that promotes continuous and happy progress is of inestimable value in promoting child welfare."

The foregoing report for 1928-29 is submitted with the full realization of the fact that much remains to be accomplished. Many problems are still to be solved. Is it better to delay school entrance until the child is six or should the present school entrance law be modified so as to make five, four or even three the legal entrance age? Is the present pre-first developmental program a better solution of the problem of developing reading readiness than another term in a good kindergarten? Would it be better to break down the "grade tradition" and so organize our schools that each child accomplishes the best of which he is capable during his school life as at present in the kindergarten under the guidance of a superior teacher? Is the present experiment an opening wedge for the transforming of all grades into "child-centered" schools? The answers to these questions we must leave for those who will continue the study wherein begun.

FAIRIES IN AUTUMN

You perch upon the leaves where the trees are
very high,

And you all shout together as the wind goes by:
The merry mad wind sets the leaves all afloat,
And off you go a-sailing in an airy wee boat.

—Rose Fyleman.

More Suggestions for the Kindergarten-Primary Classroom

EDWINA FALLIS

Kindergarten Teacher, Denver, Colorado

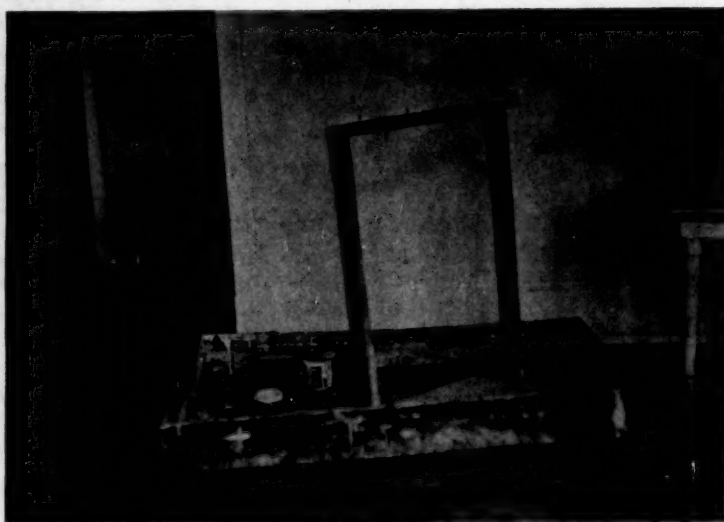


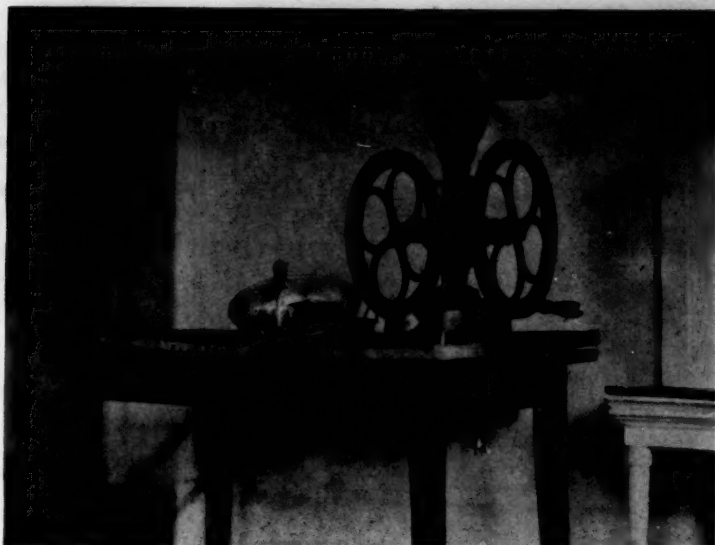
EASEL

An easel covered with loosely woven cloth makes a handy place for threaded needles. The trough is used for thread, needles, scissors and pin-cushion.

TIN TRAY

A large galvanized tin tray is most useful for keeping spilled and dripping paint off the floor.





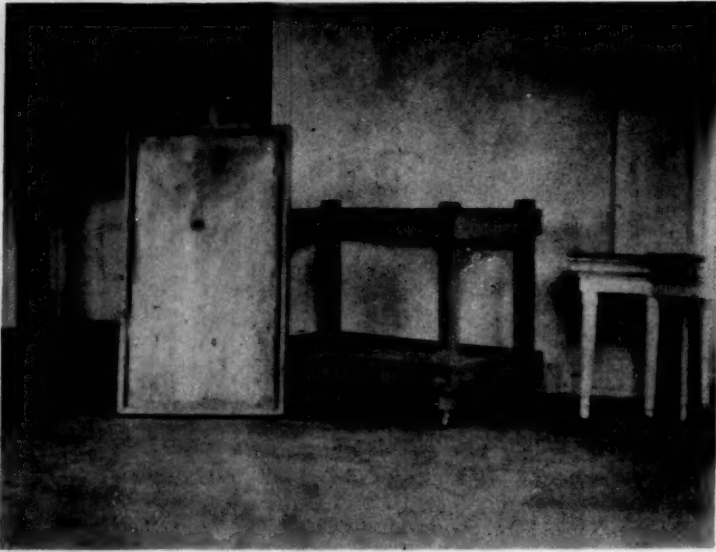
THE MILLER'S TOOLS

The large tin tray is put under the mill before it is clamped to the table. This serves to keep the wheat off the floor.



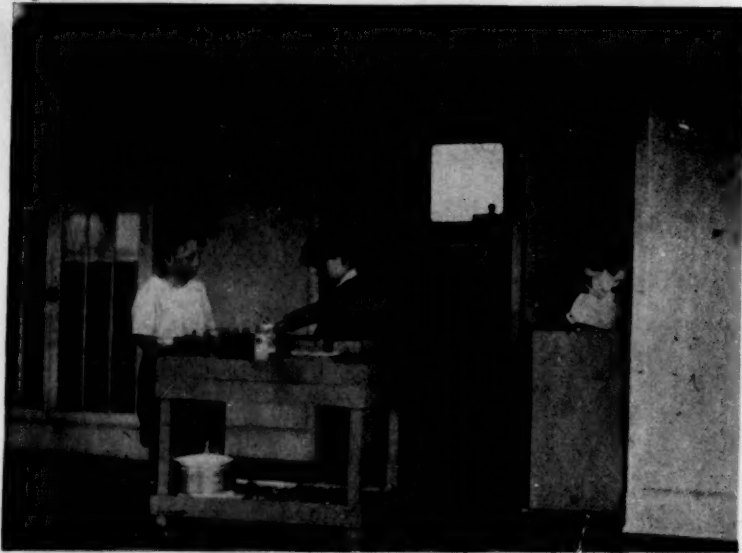
A CHURN

A large bottle with a wide mouth and screw top makes a good churn. Cut a hole in the screw top. Fit into the top a disk of thin wood or pasteboard with a hole in the center to allow the handle of the dasher to pass through. The dasher is made of wood cut round with holes bored through it. It must be a trifle smaller than the mouth of the bottle so it will pass through easily even when wet.



SERVICE TRAY

Material used in making service tray: 4 pieces pine wood $1\frac{3}{4}'' \times 1\frac{3}{4}'' \times 21''$, 6 pieces pine wood $2\frac{1}{2}'' \times \frac{1}{2}'' \times 18''$, 2 pieces three ply wood or compo board $18'' \times 29''$. The piece for the bottom tray should have a $1\frac{1}{4}''$ square cut out of each corner to allow the uprights to pass through.



The service tray is used to hold crayons, scissors, paste, string, sticks, and anything needed in the day's work. It can be moved to any part of the room or store room easily. The enameled tin plates underneath are used as individual service trays.

Supervising the Young Teacher

A report of the discussion and papers presented at a group conference of the I. K. U. convention held at Memphis, April, 1930, under the leadership of Bertha M. Barwis, Trenton, N. J.

One of the major problems of supervision in the elementary school is how to give adequate assistance to the young and to beginning teachers who come into systems of schools with varying ideas of the philosophies of education, aims of education, methods of instruction and class room practices.

How to help such teachers to adapt themselves to the special requirements of the system and at the same time to think independently about the problems which are presented daily in teaching are vital questions for any supervisory conference.

It is hoped that one of the outcomes of this conference may be the formulation of some plan which will aid supervisors to help the young, inexperienced person to develop into an intelligent and understanding teacher.

In summing up the discussion it was suggested that as members of the I. K. U. it might be possible to do four things:

First—Make a list of the difficulties which have been met by the supervisors in their efforts to help the young teacher.

Second—Organize these difficulties under specific headings. Can they be classified under such headings as: Preparation, Administration, Observation, Demonstration?

Third—Offer suggestions in overcoming each specific difficulty.

Fourth—Prepare this material for an article in *Childhood Education*.

HOW THE PRINCIPAL MAY HELP THE YOUNG TEACHER

DOROTHY KAY CADWALLADER

Principal, Washington School

Trenton, N. J.

PRINCIPALS all over this country today are being challenged to do a pioneer piece of work, namely—supervision. For years principals have been administrators and they must continue to be such, for the administrative phase of education or school work must be well organized in order that the supervisory phase may function.

There are many requisites for good supervision on the part of a principal. First of all, a principal must be willing to evaluate her own qualifications and her own work. She must weigh herself and the results of her efforts at all times. She must be a student of her own professional problems. She must be sympathetic, understanding, and patient. She must remember how she felt as a young teacher. Perhaps teaching was an easier task then than it is now.

Perhaps *she* had only one group to keep at work, while now each teacher from first grade up has at least three groups and is supposed to see each child in her class as an individual. The teacher is supposed to

know the progress of each child and to keep an accurate record of this progress from day to day in each subject. In addition, she must keep an inventory of habits, skills and attitudes. She must see the relationship of subjects and their bearing upon the individual growth of each child. She must be able to so organize her work that subjects will naturally grow out of each other until the day's work is an integrated whole. I wonder whether there is any job requiring as high mentality, as great versatility and as tremendous executive ability as that of a teacher of 1930. Into this we put young girls of eighteen to twenty with two years (three years in some states) training, before they emerge with the stamp of approval of the Normal School.

Then, the principal's task begins. Let us suppose that she is fortunate enough to have had training in supervision, and it is absolutely essential that she be so trained. Even then, it is no mean job.

She surveys her field and the various known ways of helping the new teacher—

such as visiting the teacher, holding conferences, doing demonstration teaching, suggesting educational books, holding faculty meetings. She knows that she will need to use each of the things mentioned. But she also realizes that no one of these things will automatically improve teaching. They are only the means to an end. Her goal is to develop the young teacher so that she will in time be able to evaluate her work in terms of child growth and so that she will be eager to improve herself. The principal knows that she must collect facts that will help her diagnose the needs of this young teacher. Then, she must make a very definite supervisory plan for helping her, keeping in mind the fact that growth is slow, but realizing that slow growth is more lasting than growth of the mushroom variety.

Pre-teaching conferences at first are very helpful, for the planning together of the work carried on establishes a feeling of frankness and deepens the confidence on both sides. The principal should arrange to have all conferences of whatever nature in a quiet place, the principal's office is preferable, during school hours. My visiting teacher has been very helpful in this way, for she can go in and take a class while the teacher comes to my office for the conference. Occasionally, a conference can be held in the classroom if the children are not there—particularly if it is a conference in regard to the teaching environment. It makes it more concrete to really move this table and that book case, trying the effect together—never commanding but rather suggesting a better arrangement.

Such a pre-teaching conference needs to be followed by *classroom visitation* so that the principal and teacher may talk over the actual teaching situations in terms of the children's reactions and responses. This helps to put the emphasis upon the children and not upon the teacher and removes self-consciousness.

Post-teaching conference where children's reactions are discussed and the reasons for such reactions and responses cited are always necessary after a classroom visitation. The habit of evaluating children's responses and looking for the reasons for them and the resultant behavior, attitudes, habits and skills, gives the principal a chance to set up very definite educational standards and to begin to build up in the young teacher an educational philosophy.

Lending certain books and marking specific chapters that will help clarify her thinking is often a distinct aid.

I believe that a principal should plan to visit the young teacher at least every day. She should discover where the young teacher needs the greatest help and then work on that specific thing until definite improvement is shown. It may be that the principal will want to plan to take the class herself in reading or industrial arts or conference period for several consecutive days until right habits are beginning to be formed. This helps the principal sense the situation. Sometimes it gives a young teacher confidence to see how someone else manages in such a situation. This should be done very carefully and with ample opportunity for conference and discussion lest it lead the teacher to imitate blindly without knowing the underlying reasons. In such conferences the methods used and procedure followed are evaluated in terms of child growth.

Where there are at least two classes of each grade within a school it is often helpful for the young teacher to visit an experienced teacher's room with the principal and to watch the teacher who is handling a specific phase of work. For instance, observing a low group reading lesson or seeing how children conduct themselves during the unsupervised reading period, often helps because of the concreteness.

Then, too, we are fortunate in having a *demonstration school* where the young teacher may observe expert teaching under

normal conditions. She may go there once a month or as frequently as the principal feels it is necessary.

There are certain visiting or special supervisors and something should be said to illustrate the way that a principal may use a Special Supervisor. A young teacher was having difficulty with the handwriting in first grade—the problem seemed to be one of organization. The supervisor of handwriting was invited to a pre-teaching conference with the principal and teacher in which the teacher told what she had been doing. The next day's work was planned, each of the three parties contributing information or suggestions. The following day the supervisor took the class and worked with these individuals which the teacher had designated as needing the greatest amount of help, thus showing the young teacher what to do. This was followed by a conference with all three—principal, teacher and supervisor. Of course, the principal had been present in the classroom while this plan was being carried out and was able to participate in the conference. This helped to clarify the difficulty and is one way to use a special supervisor.

The principal may also help the young teacher by giving her a very definite place on the year's program for Faculty Meetings. This year my supervisory plan centers around an Activities Program. Two teachers have worked together on a subject for the Monthly Faculty Meeting. One young teacher worked with an experienced teacher on Music. I felt that this plan would help to develop her along that line.

Another instrument that is very helpful is the making of Case Studies of Problem Children. The visiting teacher helps with this work by looking up data about the home environment, parents, etc., while the classroom teacher writes up the data regarding the child from the standpoint of his social, physical, moral and mental characteristics, and his scholastic ability in reading—writing—arithmetic—

industrial and fine arts—etc. This helps the teacher to discover why the so-called problem child is a problem and leads her to help him in a more specific way. It is one way to teach her while she is still young that she must see each individual in the light of his home and school environment. In other words, she realizes that he needs to know and understand the whole child.

I hope that we may have opportunity now to discuss some of the following questions, and in addition any others that have arisen in your minds during this talk:

A Program of Supervision

What are the advantages of a definite program of supervision?

What are the hindrances that arise in carrying out such a program?

How may such hindrances be overcome?

Classroom Visits

How much preparation should a principal make before visiting a classroom?

How often should a principal visit?

Should a principal take notes while visiting?

Individual Conferences

Where should they be held?

Should the conference be held immediately following the classroom visitation, or only after the principal has had time to evaluate her visit?

Faculty Meetings

Does the young teacher derive benefit from meetings if she does not participate either voluntarily or according to assignment?

Demonstration Teaching

What are the values and dangers of demonstration teaching?

Case Studies of Problem Children

Do these justify the time of the young teacher?

Educational Reading

How much professional reading dare one ask the young teacher to do?

Is it better to refer her to specific chapters in certain books or have her read and digest one good educational book?

What magazines should she read?

DEMONSTRATION TEACHING AS A MEANS OF HELPING YOUNG TEACHERS

MAYCIE SOUTHALL

*Associate Professor of Elementary Education,
George Peabody College for Teachers,
Nashville, Tennessee*

THE value of demonstration teaching in the training of young teachers in service depends upon two factors; namely, the amount used and the kind used. Each of these in turn will be conditioned by the needs and the potentialities of the young teachers in each separate system, and by the individual differences within each of these groups. Its value is further conditioned by the teacher's and the supervisor's concepts of education, the learning process, the curriculum, the recitation, and the function of the teacher therein.

Although at present these many conditioning factors remain uncontrolled and unmeasured, it is apparent from the evidence available that supervisors and teachers recognize demonstration teaching as one of the most desirable and effective means of training teachers in service. (1)

How Much Demonstration Teaching Is Helpful to Young Teachers?

In a recent investigation made by a committee of the Department of Supervisors and Directors of Instruction, demonstration teaching ranked very high in the demands of teachers for supervisory help and ranked second among the types of supervisory services considered "helpful by teachers." (2) Although demonstration teaching ranks high both in the study of the kinds of help teachers desired and also in the teachers' reports of the best helps received, only a small proportion of the teachers in seven well known cities noted it as being used by their supervisors. (3) From these reports, the Third Yearbook Committee inferred that supervisors are not utilizing this very helpful and constantly demanded device

as frequently and as effectively as they might.

These findings are further corroborated by a study made by the writer which involved the practices of two hundred representative supervisors and the opinions of representative members of three other professional groups who are conversant with supervision, namely: specialists in supervision, superintendents employing supervisors, and teachers being supervised. The following points are significant in connection with the topic under discussion:

I. Demonstration teaching is used by practically all of the supervisors but it is not considered of equal value to all teachers.

II. It is considered most valuable and recommended for most frequent use in the training of beginning teachers, next most frequently in helping those teachers with specific weaknesses and teaching difficulties and third most frequently for strong teachers who are attempting newer methods for the first time.

III. Among thirty-eight means used to improve teachers in service, demonstration teaching received an average ranking of four; that is, it was ranked fourth in value as means of training inexperienced teachers when the ratings of all four professional groups were combined.

IV. The average ratings of the teachers, both as to the value of demonstration teaching and the extent to which it should

(1) See studies summarized in *The Principal as Supervisor*, Research Bulletin of the National Education Association, Volume VII, No. 5 (November, 1929), pp. 332-333.

(2) Current Problems in Supervision, *Third Yearbook* Department of Supervisors and Directors of Instruction, National Education Association, 1930, pp. 47, 71, 83, 190.

(3) *Ibid.*, pp. 85-86.

be used were somewhat higher than those of the other professional groups—the specialists were second; the supervisors, third; and superintendents, fourth.

V. When the ratings of the teachers were separated into three groups—superior, average, and poor, demonstration teaching for young teachers was ranked highest by the poor teachers, second highest by the superior teachers, and third by the average teachers, the rankings being $1\frac{1}{2}$, $2\frac{1}{2}$ and 3, respectively.(4)

From these responses, we may infer that teachers desire and specialists recommend more demonstration teaching than supervisors are now using or consider valuable. Furthermore, the teachers rank it second among all the supervisory activities used to develop in a young teacher desirable teaching procedure.

What Kind of Demonstration Teaching Is Most Helpful to Young Teachers?

Although many different kinds of demonstration teaching are employed, the types most frequently used and judged as most effective are: first, for individual teachers—a demonstration by the supervisor with the teacher's own pupils; and second, for a group of teachers—a capable teacher working with her own pupils. There seems to be very little difference in the principles the supervisors consider essential to demonstration when planned for a single teacher and when planned for a group of teachers. At least half of the supervisors stated that they observed the following principles: the demonstration lesson or lessons are taught in a regular classroom; it is carefully planned to meet the needs of the observer or observers; it is followed by a conference; both observers and demonstrator know the standards to be used in evaluating the observation.

The above suggestions refer to demonstration teaching in general. It is rather self-evident, however, that the young teacher's needs which may be met through

demonstration teaching are very different from those of an experienced teacher. But the nature and amount of this difference remains practically an unexplored field. Therefore, the remainder of this discussion must necessarily be based upon observation and experience rather than upon experimentation.

In dealing with newer types of teaching, supervisors are finding it necessary to develop newer techniques of supervision. Before a supervisor attempts to teach for a young teacher, she should determine by means of observation and a study of the school records, the teacher's specific needs and potentialities; what the pupils have accomplished so far, and what are the next things to work for. The supervisor may ascertain the young teacher's fundamental needs by using the following points in checking the stage of her development:

I. Her knowledge of child nature and its development.

II. Her proficiency in adopting the school and its program of work to the physical, mental and social needs of the children.

III. Her understanding and skill in handling children's desirable and undesirable responses.

IV. Her facility for keeping the spirit of the room that of a laboratory in which independent, happy children are busily solving their individual and group problems under wise teacher guidance.

V. Her anticipation of the needs of the group and of each individual in the group.

VI. Her ingenuity in providing stimulating materials and provocative learning situations.

VII. Her ability to unify and integrate the pupils' activities and to direct them into the major fields of human endeavor.

VIII. Her ability to obtain objective measureable progress in habits of work, in their relationships with each other, as well as in their subject matter learnings.

After checking upon these and other miscellaneous points, the supervisor is

(4) Southall, Maycie, *Direct Agencies of Supervision as Used by General Elementary Supervisors*, Contributions to Education No. 66, Nashville, Tenn., George Peabody College for Teachers, 1930.

ready to show the teacher how to take the next steps in her own and the children's development—how to secure a better understanding of the children; how to interpret their responses, and to lift them to newer levels of learning; how to make better adjustments in routine matters; how to differentiate in the treatment of problems common to the group and those that concern only special children; etc.

The supervisors must remember to help the teacher improve along the lines of her greatest strengths as well as along the lines of her greatest weaknesses. In fact, she should capitalize the young teacher's successes, attacking her weaknesses indirectly rather than directly. Every young teacher needs to feel that she can and is succeeding and that the supervisor is as anxious to help her succeed as she is to help the children.

When demonstrating for the young teacher, the supervisor may follow one of two procedures: first, she may assume entire direction of the group, say throughout a work and conference period; or she may be a part of the situation and give help and suggestions as needed without taking over the direction of the group. In other words, the supervisor may mingle with the various groups in much the same manner as the teacher—ask questions which makes the child evaluate what he is doing; giving suggestions when needed; participating in the discussion of various points; suggesting sources of information; and showing an intelligent, helpful interest in the group's undertaking.

It would seem that the latter would be the more natural and the more valuable type of demonstration in an informal situation, except in cases of especially weak or untrained teachers who lack a definite concept of their place and function in furthering the learning of the children. In such cases, it is sometimes necessary for the supervisor to take over the entire direction of the group for a part of several consecutive days until the teacher develops an understanding and some skill in evalu-

ating the newer teaching techniques.

If there are many beginning teachers, it will not be possible for the supervisor unaided to do as much demonstration teaching as will be needed, especially in the first semester. It would seem wise, therefore, to supplement the supervisor's demonstrations with another form of demonstration teaching, usually called "directed observation." That is, send the young teacher to observe a teacher who is especially strong in the phases of the work in which the young teacher is weak. These assigned observations, accompanied by discussions and readings, might continue for a part of several consecutive days and at infrequent periods thereafter when the young teacher expressed a desire to see some one do the thing she was finding most difficult. These assigned observations should begin with the easier more observable things such as: what things contribute to make Miss Jones' room a happy working situation? or in what ways does Miss Jones anticipate the children's needs? and progress to the more difficult less easily observed phases of teaching procedure.

It should be mentioned, in this connection, that although "directed observation" is used by only approximately half of the two hundred representative supervisors whose practices were studied, over four-fifths of the teachers and approximately three-fourths of the specialists in supervision recommend that a series of demonstrations of this nature be "used or emphasized" as an effective means of continuing the training of young teachers. They also recommended that it be used for teachers attempting new methods, to correct weaknesses in otherwise strong teachers and for teachers attempting to improve along any specific line.

In summarizing, we may say that the possibilities of demonstration teaching as a means of training young teachers is really an unexplored subject. It needs careful, controlled investigations carried on under both formal and informal situa-

tions. Such evidence as there is available, however, indicates that teachers want more demonstration teaching than they are now receiving. Furthermore, they consider it one of the most helpful types of supervisory assistance which they receive. Specialists in supervision are in accord with

both of these opinions. This presentation has called attention to some of the factors which will necessarily condition the value of this type of supervisory service and has suggested some changes which newer methods of teaching call for in our demonstration teaching procedure.

WHAT METHODS SHOULD BE EMPLOYED IN CHANGING THE POINT OF VIEW OF A YOUNG TEACHER?

MARJORIE HARDY

*Principal, Friends' School,
Germantown, Philadelphia, Pennsylvania*

THIS question is interpreted to mean the point of view of the young teacher *regarding supervision*.

The method in general must be one that will bring out those qualities that are noblest and best in every teacher.

The chief responsibility of the supervisor is to create conditions which will call for the best work of the teachers. The feeling of friendliness toward the supervisor is the first necessary requirement. The supervisor can do much to establish friendly relationships by bringing about the right attitude in the mind of the teacher through leading her to see the supervisor as

1. A human being interested in many things.

2. A person who is a student of her own profession and who needs to make frequent visits to the classroom to gain information for her own enlightenment.

3. A person who is responsible for providing conditions for continuous uninterrupted learning on the part of the children, and who needs to make frequent visits to the classroom to determine whether or not the children on a particular level of ability are having opportunities for continuous growth.

Teachers should hold well in mind the ultimate objectives of education and learning. These they may well get in group conferences. Each individual teacher's problem is to determine the way and the distance individuals in her group can move in the direction of the ultimate

goals. Individual conferences with the supervisors aid the teacher.

4. A consulting teacher ready to come to a classroom when called. At such times help should be given through conference, through demonstration or by means of both.

Right attitudes toward supervision are established when emphasis is put on what the children do or do not do rather than on what the teacher does or omits. Teachers who are given opportunities to participate in curriculum formulation develop a feeling of cooperation and responsibility toward their particular work.

The outcomes of supervision when supervisor and teacher have fundamentally correct attitudes and point of view will be:

1. "a clearer conception of educational objectives
2. a tendency to analyze teaching procedure in the light of educational psychology
3. a growing tendency to individualize instruction
4. active interest in making use of educational research and experimentation in the solution of problems of individual differences
5. a more impersonal and objective attitude to the evaluation of results
6. a growing consciousness of need and value of a general culture
7. a fine spirit of cooperation."*

* Department of Superintendence—Eighth Yearbook—pp. 206.

BOOK REVIEWS

Editor, ALICE TEMPLE

Adler popularizes his old tune.—There are the equivalent of 16 chapters in Adler's latest book,¹ all of which are concerned with one principle—human striving for superiority. The following enumeration of chapter titles will suggest the illustrative emphases in the work: Introduction, the Unity of Personality, the Striving for Superiority and Its Educational Significance, Directing the Superiority Striving, the Inferiority Complex, the Development of the Child: Preventing the Inferiority Complex, Social Feeling and the Obstacles to Its Development, the Child's Position in the Family: the Psychology of the Situation and the Remedy, the New Situation as a Test of preparation, the Child at School, Influences from Outside, Adolescence and Sex Education, Pedagogical Mistakes, Educating the Parent, Appendix I: An Individual Psychological Questionnaire, Appendix II: Five Case Histories with Commentaries. As one might almost surmise, however, even from the headings themselves, the fundamental theme is altered or elaborated so little as the discussion progresses that no particular violence would be done to the principle of appropriateness were one caption substituted for another.

For those who have thought only casually concerning the striving of human beings to excel and the patterns of compensatory adjustments which are frequently evolved in the face of failure, *The Education of Children* will be fertile in suggestions. The Appendix will be particularly valuable in indicating more than usually concretely the way in which the "Individual Psychologist" proceeds with his analysis of cases.

If one would appreciate Adler's contribution to the full, however, he must be little annoyed by an interpretation of the complexities of human motivation in monadic terms, by a rambling incoherent presentation,

by vague figures of speech, logical errors, or sweeping uncritical statement. In fact, in view of the opus' lacks, although it does have merits, one hesitates to recommend it to students, lest for each workable idea acquired a misconception or dogma is annexed. The subsequent brief sample of statements from the text should substantiate our judgment: "We could not possibly educate or improve a child if the mistakes he made were innate (p. 97)." "One finds that the ear of a musical person has better developed curves (p. 298)." "It has been the experience of Individual Psychologists that whenever intelligence tests reveal a great lack of intelligence, the scores can be improved if we find the right methods. One of these methods is to let the child play with the particular intelligence test until he finds out the right trick as well as the right preparation for taking such an examination. He will make better scores on subsequent tests (p. 171)."

On the question of curative techniques Adler's discussion is conspicuous for its paucity of detail. Encouragement is his panacea. The discovery of ways of manipulating difficult personal and social situations so as to buoy up the depressed is left largely to the ingenuity of the reader. One could, moreover, be a readier convert to the author's program if reports were given of the later developments in the specific cases analyzed. Clinicians familiar with the discouragements of follow-up work would enjoy being regaled with a few convincingly and accurately described happy case outcomes.

Adler's general reputation would lead one to infer that he is a more effective clinician than theorist.

HELEN LOIS KOCH,
The University of Chicago.

An Autobiography of Elizabeth Harrison.—
Not only the friends and former students of

¹ Alfred Adler, *The Education of Children*, New York: Greenberg, 1930. Pp. 309. \$3.50.

Elizabeth Harrison but all who are interested in early childhood education and in parent education will find "Sketches Along Life's Road"* a fascinating commentary on the pioneer history of these movements in the United States. For more than forty years Miss Harrison was an outstanding leader in teacher training in the kindergarten field and in the education of mothers in the more intelligent nurture of their children.

"Sketches Along Life's Road" was written during the last five years of Miss Harrison's life after she had retired from active service as president of the National Kindergarten and Elementary College and was living quietly in San Antonio, Texas. After her death in October, 1927, the book was prepared for publication by Carolyn Sherwin Bailey in collaboration with Belle Woodson, and was published in May, 1930. Of the purpose of the book Miss Harrison says in a brief foreword: "This book was written to show not only the progress that educational methods have made during my lifetime, but also to emphasize the importance of the teacher realizing the greatness of his work not merely as a pedagogue, but as a friend to each child under his influence."

In commenting on the significance of this book in her introduction, Miss Bailey remarks: "In a period that lays emphasis upon materialism, we are discovering the power for inspiration in the biography; the experiences of individuals who made history become a lexicon by means of which we may translate the enigma of the present and envision the future through the telescope of the past. . . . Reading, assembling and projecting Miss Harrison's thoughts upon the plane of the gigantic educational field of today, I find that everything for which she gave her years has persisted; the value of cultural influence, development of the child's creative ability, recognition of the importance of the period of early childhood, a greater elasticity in the entire school system, the need of parental education—these are the values of progressive education today. . . . Everything for which she struggled has become a part of the educational pageant—recognition of the teaching profession, enrichment of the school program, better parenthood. A record of the trail-blazing Elizabeth Harrison's life represents and gives new dignity to teaching and lights anew the

torch of our educational wayfaring."

As a storyteller Elizabeth Harrison has had few peers, and entirely aside from its historical value "Sketches Along Life's Road" is delightful reading as a story. This is especially true of the chapters describing Miss Harrison's early environment, her childish escapades, the aspirations and struggles of her girlhood, and the thrilling tale of her early education and experience as a kindergartner, training under Alice Putnam in Chicago, Susan Blow in St. Louis, Madam Kraus-Bolte in New York and later Frau Schrader and the Baroness Marenholz-Bulow in Germany. Miss Harrison's visible and invisible friends are made to live for us through her vivid characterization,—old Aunt Ginny, Moses and Elijah, Queen Elizabeth, Madam Kraus, Susan Blow, the Baroness and many another become living persons with a vital message.

Against the background of the narrative we are able not only to comprehend but to feel sympathetically the social customs and tabus of the period, the limited interpretation of education, the prejudices and restraints under which women particularly labored, the cultural backwardness of the Mid-west, the struggle which higher education entailed, the misunderstanding of childhood. The lights and shadows are so cleverly handled that we can follow the molding of the personality of Elizabeth Harrison and trace the influences that brought her to the dramatic acceptance of her life work. The unflinching consecration of the life, its entire devotion to a great cause, its unflagging zeal, amazing initiative and breadth of contact are clearly revealed as the story proceeds with its history of struggle, opposition and limited means, with mistakes and shortcomings frankly admitted, and with triumphs and achievements faithfully and humanly recorded.

It is an unusual achievement,—a very rapid rising at the beginning from an unknown freshman in the training class to assistant director of the kindergarten, principal of a school, organizer and conductor of mothers' classes, founder and president of a professional college for women and author of a book translated into seven languages,—all in the first ten years of her career. It is also an unusual life because it carried on the promise of its early rising through more than forty fruitful years in which many other significant books were written, scores of lectures

*Elizabeth Harrison, *Sketches Along Life's Road*. The Stratford Company, Boston, Massachusetts, 1930. 227 pages.

delivered, outstanding service rendered to several organizations, and creative building contributed in her own institution. The book carries no greater inspiration than the growth of this woman who was still writing at seventy-eight, and who sitting "in the shadow of accumulating years" could say "One of the chief joys of my life has been to watch the sweep forward from the idea of education as a formal acquisition of material facts and philosophic theories, to the more vital work of creative activity and the significance of community responsibility. Many mistakes have been made and are still being made, but the advance has been so great that it is enough to thrill the hearts of all lovers of childhood."

EDNA DEAN BAKER,
National College of Education,
Evanston, Ill.

A new textbook on general supervision.—The recognized aim of supervision according to the Department of Superintendence is the improvement of instruction. George C. Kyte, in *How to Supervise*,¹ seeks to carry out this objective, stating that it is the aim of the book to present in usable form principles and practices which will be of aid in performing the tasks of supervision.

The organization of the books falls into four divisions, namely, History and Philosophy of Supervision, Organization for Supervision, Techniques in Supervision, and Supervising Types of Teachers. Division I provides a desirable background for supervision. Division II, that on organization and administration, is very completely and graphically given. Chapter IV of this division, The Duties and Responsibilities of Supervisory Officers, offers definite help to every person who holds a supervisory position.

Division III, Techniques in Supervision, is the most helpful section of the book. It begins with a chapter on the Planning of Supervision, which contains material suggestive to a supervisor who would make a survey of the community in which she teaches. This chapter would be more helpful to administrators than to supervisors of special subjects. Chapters VI and VII on Classroom Visitation and Conferences apply directly to any supervisor. Many supervisors who have used the book state that they found the greatest help in

these chapters because of the concrete situations described and specific suggestions given. Chapters VIII and IX, which deal with teachers' meetings and supervisory bulletins, contain very little which is essentially different from material in other books and articles dealing with these subjects. However, the following chapters on demonstration teaching take up such vital matters as types of demonstration teaching, preparation for the demonstration lesson and checking the results. The last chapters in this division deal with supervisory uses of courses of study, tests and measurements and research, and are not written so technically but that classroom teachers as well as supervisors can use them.

In addition to history, organization and technique of supervision, the author presents in the last division of his book, "Supervision of the New Teacher", "Supervision of the Weak Teacher", "Supervision of the Superior Teacher". The chapter dealing with the new teacher will aid a newcomer in the system with its timely suggestions concerning bulletins, explanations of the course of study, and the orientation of the new teacher. There has been a rather common agreement in the past that the superior teacher did not need supervision. If the weak teacher can be made good why cannot the good teacher be made better? Professor Kyte proves the affirmative side very effectively in his closing chapter by showing how the better teacher can be led to self-improvement through guidance: (1) in introducing wholly new methods and devices into the system; (2) in making critical evaluations of experimental investigations; and, (3) in demonstration teaching.

The book is written in a simple, straightforward manner. After each chapter there are questions and problems which help the reader in applying the principles and procedure given in the text to his own situations. These are followed by selected bibliographies, complete and up-to-date. Some things might have been mentioned which are omitted as, evaluation and selection of texts, and evaluating the efficiency of the supervisor. The book is a distinct contribution to the field of supervision, however. It is a book which supervisors and teachers will wish to read and re-read and to which they will turn again and again for definite help.

GRACE E. STORM,
University of Chicago.

¹ George C. Kyte, *How to Supervise*. Chicago: Houghton Mifflin Company, 1930. Pp. XV+468.

AMONG THE MAGAZINES

Editor, ELLA RUTH BOYCE

The THEATRE GUILD MAGAZINE for September has an article which is interesting, not only for its content, but also because the much discussed question of Progressive Education finds a place in this specialized journal. Under the topic Discipline Through Art, Paul N. Turner, in the last of three articles, answers the query, "What does a child gain and what may he lose in discipline for life through the more spontaneous methods of the Progressive School?" His definition of this type of education is that it "seeks through the use of the arts to develop the capacities of the child rather than merely to drill him in formally classified knowledge." He explains further that there is "a minimum of guidance and show of authority," and that "the maximum educational emphasis is upon the expanding of personality and the gradual synchronization of physical, mental, and emotional qualities through doing." He believes that it is but natural for people to inquire as to the results of this change of emphasis in school life. He contrasts the children who have had this sort of training with those who have had the older, more formal type. Of the former he says that "their interest and curiosity are strongly alive and that their mental faculties are beginning to take on an edge. On the other hand, I have found that the finished product of the elementary school definitely shows the effect of the routine which has been imposed. Formal education has produced a formal child. Constant conformity has limited his individual expansion. He is, on the average, more colorless in mind and more timid in expressing thought. He is less eager, less self-confident, less willing and happy as regards his future education. Between him and the average product of the progressive schools I find no parallel in development of mind save in respect to memory. In respect to imagination, concentration and the will to do, the latter is much further along." This being said, there remains the

question as to whether the child from the progressive school has had sufficient discipline. Mr. Turner does not minimize the importance and value of discipline. He says, "Mental discipline is a necessary foundation for personal mastery; emotional discipline for living happily with others." It is inevitable that there should be some clashes between the progressive schools and the more established colleges with their requirements, and he believes that some progressive schools have erred on the side of developing individuality. He says, "progressive education needs to criticize itself most carefully." But he does not believe that success or even admission to college is the paramount educational aim. In fact, he says, "A college education is not necessarily the desirable thing for every child. Our colleges are already overstocked with students who cannot maintain a fair academic grade, and who would be more usefully and happily occupied preparing themselves by experience for their life work." He discusses in detail and answers affirmatively these three questions: "Has progressive education through the arts the disciplinary value of formal scholastic education? Does it help a child in meeting college entrance requirements? Does it better fit him to choose his life work?" His final conclusion is important—"Yet in evaluating progressive education we must remember that it cannot do its job alone. The progressive school presupposes the cooperation of the progressive home." He believes that the parent who is not willing to give this cooperation should not send his child to a progressive school but for him who will he says, "The courageous and helpful parent of a child educated through the arts is very likely not only to have his immediate wishes fulfilled but also to see many of his dreams come true."

The NEW ERA MAGAZINE, the English journal representing progressive education, is

now being issued monthly, and in its August number it discusses editorially the matter of vacations. Parents need to plan as carefully for vacations as they do for school life, and should not think of a holiday as a time when children are to do nothing. "If education is to be a continuous process of all-round development, there should be no sudden jerks and breaks between home and school. As long as we regard school as a place for work and disciplinary training, and home as a place for play and freedom, we are putting the child's two worlds in opposition to each other. This makes for a wrong contrast between school work and life." The editor believes that "In the right type of school, the life resembles a sensible holiday. By an equally judicious planning for the holidays, these continue the fun and interest of living."

In this same issue, A. L. Milne is interviewed on "The Right to Happiness." He speaks from the standpoint of a parent but his opinion is as valid for teachers. He says, "All children's lives ought to be happy; they should be saved from feeling secretly miserable about anything they have to do." He thinks that parents—shall we add teachers?—"should study more the happiness of their children. And they should treat them as reasonable beings. For a child IS a reasonable being—so reasonable that he makes his father feel most unreasonable at times, and futile." The interview speaks in some detail of his experience as the father of Christopher Robin, and contains a defense for the only child. This is interesting because it is generally accepted as a truism that the only child has a difficult time. He says, "An only child seems to me to stand a better chance of being treated as, and of being, a reasonable person, than a child who is one of a family, for he finds his level earlier with grown-ups." The interview ends as it began, "It is the duty of parents to make and keep their children happy. Nothing else matters."

A part of the paper on Family Relationships in the Changing Home read by Mrs. Sidonie Matsner Gruenberg before the First International Congress on Mental Hygiene in Washington in May is printed in this same journal. A few quotations will indicate the trend of its argument. She believes that the changing conditions are imposing new obliga-

tions on the home. She says "There remains little excuse for the family unless it can develop a monopoly of certain spiritual functions." But she believes it is important that this be done. "For, despite the breaking away from the patterns of the past, the home still stands out as the most important single influence in the child's development." She says that it is becoming increasingly difficult for the home to realize its possibilities for "Obedience has ceased to be a cardinal virtue, but parents have failed in most cases to find an effective substitute." She believes that the best parents are not necessarily those who sink themselves in parenthood. "Many of us suspect that we may really be of greater help to our children if we develop our own individuality to a higher level, if we achieve an enrichment of our own personalities so that our children may be glad to associate with us on terms of equality."

This same journal has a description of A New Plan of Homework described by Helen K. Sheldon as worked out in her school. It is explained in some detail but is summed up thus: "In order to encourage accuracy we have a certain amount of learning by heart each day. All the rest of the homework has been made voluntary work." Of this plan, she says, "I notice that homework, considered as a privilege, is already much more appreciated." Her conclusion is, "Though we believe in homework, we do not believe that it should be stereotyped or burdensome, and we have a greater belief still in opportunities for research and for browsing, for:

What is this Life, if, full of care,
We have no time to stand and stare?"

In the JOURNAL OF HOME ECONOMICS for September Carleton Washburne and Rose H. Alschuler write on The Contribution of Preschool Education to a Public School System. Mental hygiene and Nursery Schools are presented as two important factors which have greatly modified educational thinking and practice in the past decade. Winnetka, where Carleton Washburne is superintendent, has had the advantage of a nursery school for the past three years, and the authors say, "We find that the nursery school has a very real significance in the system and that its implications and potentialities are quite separate and beyond the immediate service it renders to a

small number of children." They believe that "For the present, nursery schools in public school systems must be considered only as laboratories." A number of instances are given showing how the nursery school functions in this way, serving the entire community through the dissemination of its findings. It is their hope that this service will enable "mothers to give children of preschool age a more adequate preparation for adjusted, well-balanced, healthy and happy lives." It also serves the school in that it is a "source of information and stimulus to the teachers." Its value in pre-parental education is being demonstrated, and for this purpose it was placed in a junior high school. Lastly, "Another potentially important phase of the place of the nursery school within the school system is the opportunity it offers for long-time study of children."

In EDUCATION for September Mary Chappe Hissong and Clyde Hissong discuss The Scientific Movement and Progressive Education. Their theme is indicated in the opening sentence—"In a rather desperate attempt to be scientific, education has missed the fact that the child is the most important consideration." After full discussion, this conclusion is made: "In spite of the criticism, justly given, to the progressive school,—the criticism that it lacks guidance, and in the name of freedom has limited self-expression to the product of meager individual insight,—it is laying the foundation for a truly scientific education. A system that is rigorously tested

by philosophic thought and provides for the realization of an individual who is able to think for himself, taking into account all the information at hand. It is developing within its pupils a scientific attitude." This is an especially interesting conclusion, since progressive schools are more usually justified by their training in the arts. There is also a warning against subjecting progressive education to too narrow inquiry and testing. Even here they think "we can not escape from the undesirable results of the scientific movement." They say, "The progressive school is trying to develop children with individuality; it must not try to measure that product by agreement with a quantitative standard that is uniform. The values that accrue are qualitative and can not be measured by quantitative labels. Individuality and a liberated intelligence can not be measured without a consideration of values and human welfare."

In the same journal Gertrude Best Hammond of Los Angeles discusses The Activity Program of the Modern School. This article discusses the new schools in various foreign countries, which have received an impetus from America but which are going farther than we have. She says, "When we learn what of inspiration and methods Europe has borrowed from our own educators, we cannot help wondering why America lags behind in meeting the child in a program of interest, unfettered by conformity to a pattern imposed from without."

Children are required to have at least one semester in the kindergarten before entering the first grade, except in cases of unusual children. In such cases the requirement may be waived by the assistant superintendent in charge of elementary grades, upon recommendation of the principal.

Recommendation for the admission of an underage pupil to the kindergarten should be based upon the results of the Detroit Kindergarten Test, his I. Q., if he has had an intelligence test, and any other evidence of fitness which the principal and teacher may be able to secure. A general statement that the child seems ready to enter kindergarten is not sufficient.

School Bulletin, No. 1,
Minneapolis Public Schools,
August 30, 1930.

The Citizenship Readers

A new series of basic readers, Pre-Primer through Book VIII, which appeals to the child's power of creative and independent thinking; emphasis upon character education.

BOOKS

A Happy Day	Boys and Girls Out
City and Country	of Doors
School Days	Makers of America
Good Citizens' Club	Notable Events in the Making of America
Team Work	
American Government and Citizenship	
Teachers' Manual for Primary Books	

J. B. LIPPINCOTT CO.
1249-57 South Wabash Avenue
Chicago

PROGRESSIVE EDUCATION

A liberal, humanitarian magazine for the modern educator and parent, reflecting the new tendencies in education and life—stimulating, practical, helpful.

CONTENTS FOR OCTOBER

Robert Morris Lovett	Charles W. Eliot
Paul Goheeb	New Education
Dr. Arthur Ruggles	
The College Student and Mental Hygiene	
Sinaida Hodnitskaya	
Soviet Children and Their Schools	
F. B. Riggs	A Plea for International Amity
Book Reviews	News of the Association

Published the first of January, February, March, April, May, October, November, December, by *The Progressive Education Association*, 10 Jackson Place, Washington, D. C. Francis Mitchell Froelicher, Editor.

Each subscription includes membership in the Association, with all its services in solving home and school problems, aid in securing positions, finding the right school, and attendance on its annual conference. *Special offer:* With each subscription entered this month, two reprints will be included free. Send for checking list. Send for clubbing rates with other magazines and important books on education.

Progressive Education Association,
10 Jackson Place, Washington, D. C.
Dept. H.

Enclosed please find my check for \$3.00 for which enter my subscription to **PROGRESSIVE EDUCATION** for one year, beginning with the October, 1930, issue. This entitles me to membership in the Progressive Education Association. Send the following: Reprint list _____ Clubbing list _____

Name _____
Address _____

ANN-RENO TEACHERS' TRAINING SCHOOL

Formerly Montessori School

Two year course in Kindergarten and First Grade Training. Students are well grounded in cultural as well as professional courses. Progressive methods given. Students are eligible for examinations for Kindergarten license given by the New York City Board of Education.

Catalogue upon request

309 WEST 87TH STREET SCHUYLER 7676

SUBSCRIPTION BLANK

Address:
CHILDHOOD EDUCATION
1201 Sixteenth St.,
Washington, D. C.

Price per year:
\$2.00 if a member in any
supporting organization
\$2.50 for all others

PUBLISHED MONTHLY
Except July and Aug.

Name

Address

NUMBER

STREET

CITY

STATE

Educational Position.....

Membership in Supporting Organization.

Please Check.

A. C. E. (I. K. U.)

N. C. P. E.

N. C. N. S.

